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COURSE MANAGEMENT PLAN 05C10(U) PERSPECTIVE
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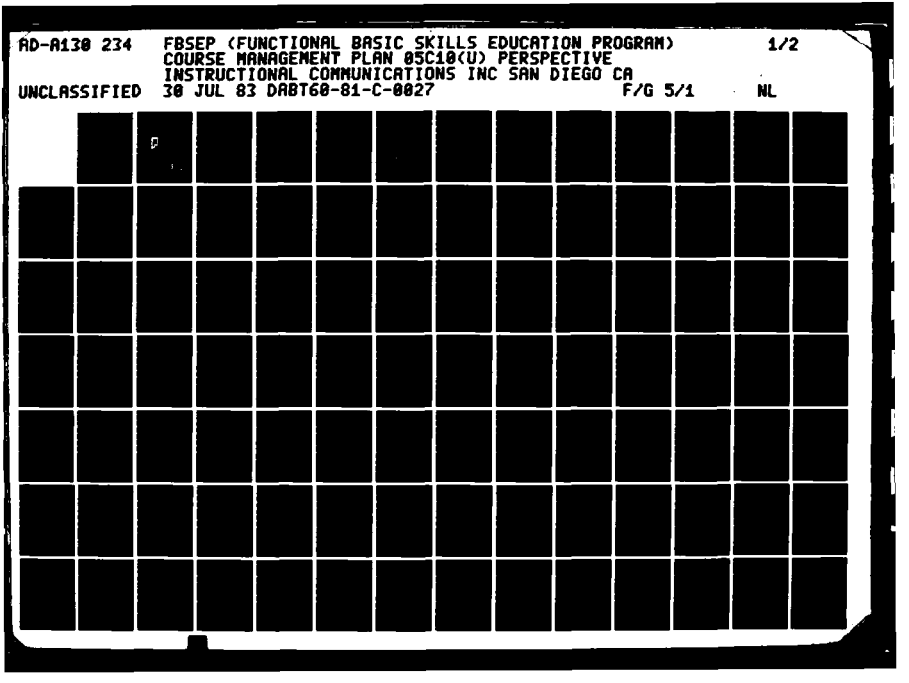

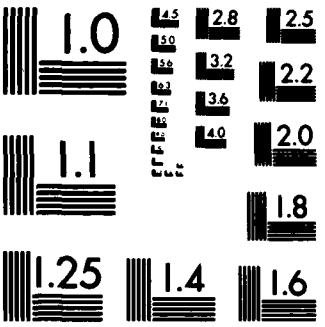

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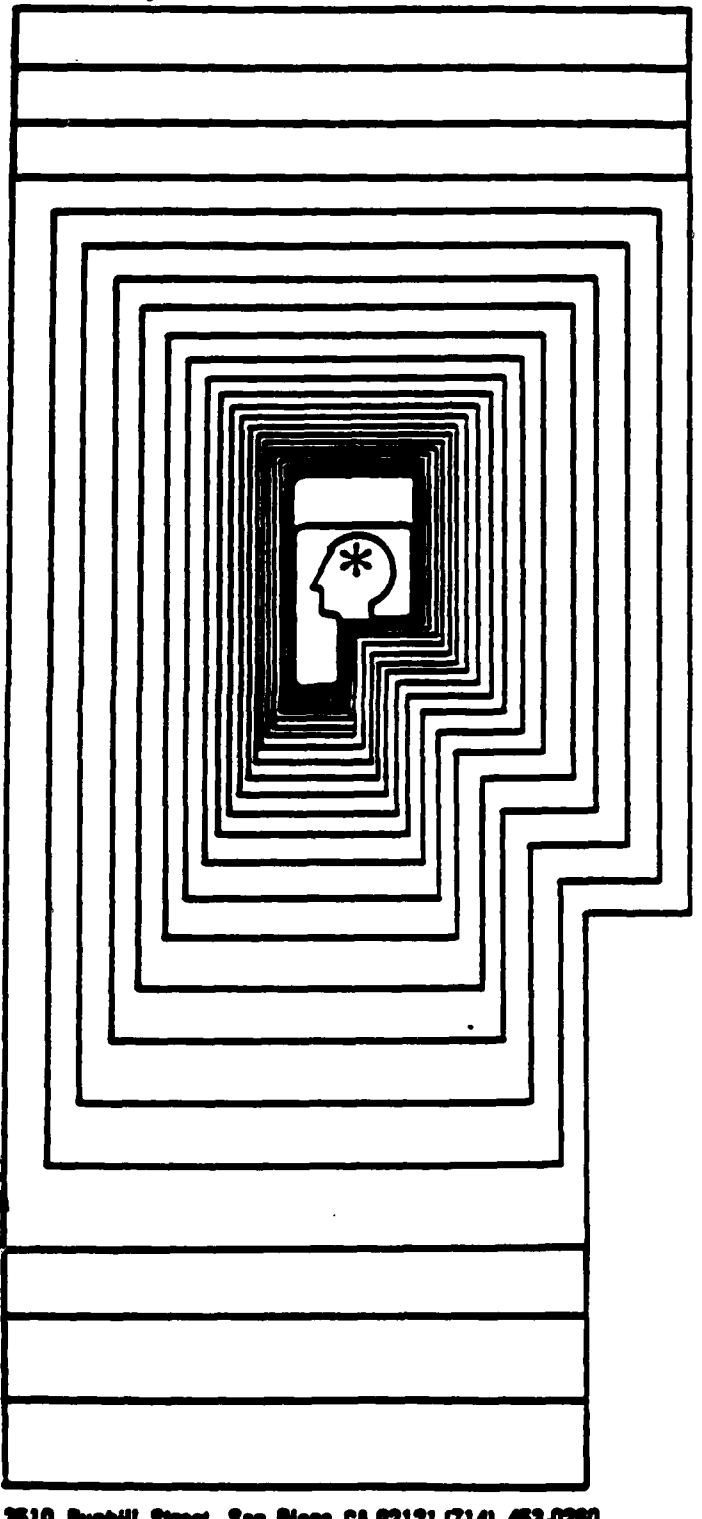

05C10 FBSEP
COURSE MANAGEMENT PLAN

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REPORT DOCUMENTATION PAGE

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1. REPORT NUMBER	2. GOVT ACCESSION NO. / 3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle): 05C10 Functional Basic Skills Education Program (FBSEP) Course Management Plan	5. TYPE OF REPORT & PERIOD COVERED: Course Management Plan
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s): Perspective Instructional Communications	8. CONTRACT OR GRANT NUMBER(s): DABT 60-81-C-0027
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Perspective Instructional Communications, 3510 Dunhill Street, San Diego, CA 92121	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS: Training Developments Institute, ATTN: ATTG-DOR, Fort Monroe, VA 23651	12. REPORT DATE: 30 Jul 83
	13. NUMBER OF PAGES: 116
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	15. SECURITY CLASS. (of this report): UNCLASSIFIED
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

functional basic skills	student control
prerequisite competencies	student records
basic skills	learning strategies
course management	teaching strategies
course administration	instructional sequence

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

The course management plan contains guidance needed to successfully conduct the functional basic skills education program for the radio teletype operator. Procedures, administration and overhead requirements are described. Instructor qualifications are specified. Teaching and learning strategies of the course are called out. Student records and management guidance are provided.

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I. COURSE ADMINISTRATION

Procedures

The following procedures are to be used as guidelines and will have to be modified to accommodate any changes to current processing, course enrollment procedures, location of facilities and/or conditions that would prohibit compliance.

1. The Diagnostic Test and Student Questionnaire will be administered to all MOS 05C students present in the battalion each Friday who are scheduled to begin training in the course. This test will be administered by FBSEP personnel in the battalion classroom or other mutually acceptable facility. In addition, ASVAB scores will be collected for each student.

2. The Diagnostic Test will be graded and the results of the test, the Student Questionnaire and the ASVAB scores will be processed according to the Diagnostic Test Model to identify the students to be enrolled in FBSEP.

3. A schedule of FBSEP lessons in list form (see Appendix F) will be prepared for each student and will be provided to the records section of the MOS 05C course prior to 0700 hours on Monday following the test administration. This is called the FBSEP Lesson Prescription.

4. Those students who miss the Diagnostic Test on Friday will be made available to the FBSEP representative the following Monday for immediate processing (diagnostic testing). A FBSEP representative will be on site in the course area at 0700 hours each Monday for make-up testing. A classroom within the course area will be provided for administering the Diagnostic Test to the late arrivals. An addendum (second list) to the initial list will be prepared by the FBSEP representative and forwarded to the course for accountability and coordination of student enrollment and attendance in FBSEP.

5. From the two sets of lists prepared as described in the previous paragraphs, an enrollment roster will be prepared by the BSEP Branch. (See Appendix A.) This roster will list those students who are to participate in Functional BSEP and identify the FBSEP sections they are to take, that is, front-loaded or after an annex. The roster will show the time and place of the Functional BSEP training. It is expected that most students will receive some front-loaded instruction, although some will go directly to the AIT course. (See Figure 1.) An estimate of the number of students needing front-loaded instruction is given in the Student Loading Limits section of the Course Management Plan.

6. While students are enrolled in Functional BSEP, their attendance will be reported to the records section of the MOS 05C course. The MOS 05C course will maintain records of hours of FBSEP attendance so that the same records system and procedures can be followed throughout the students' training period.

7. The Functional BSEP training will be conducted on the same hourly schedule as the AIT course. This is to ensure that student control in the training area will be compatible with the unit training schedule. Students enrolled in Functional BSEP will be carried in a down-time status in the computer-managed records system. All time spent in Functional BSEP will be identified exclusive of course time. The category indicating down-time for FBSEP instruction will be designated by the course.

8. The student control procedures currently in effect in the AIT course will apply to students participating in the FBSEP. Test Control slips, F. G. Form 6443 (1 Oct. '78) will be used to control student movement from one class, building, or area to another. An absentee report will be made to the student's

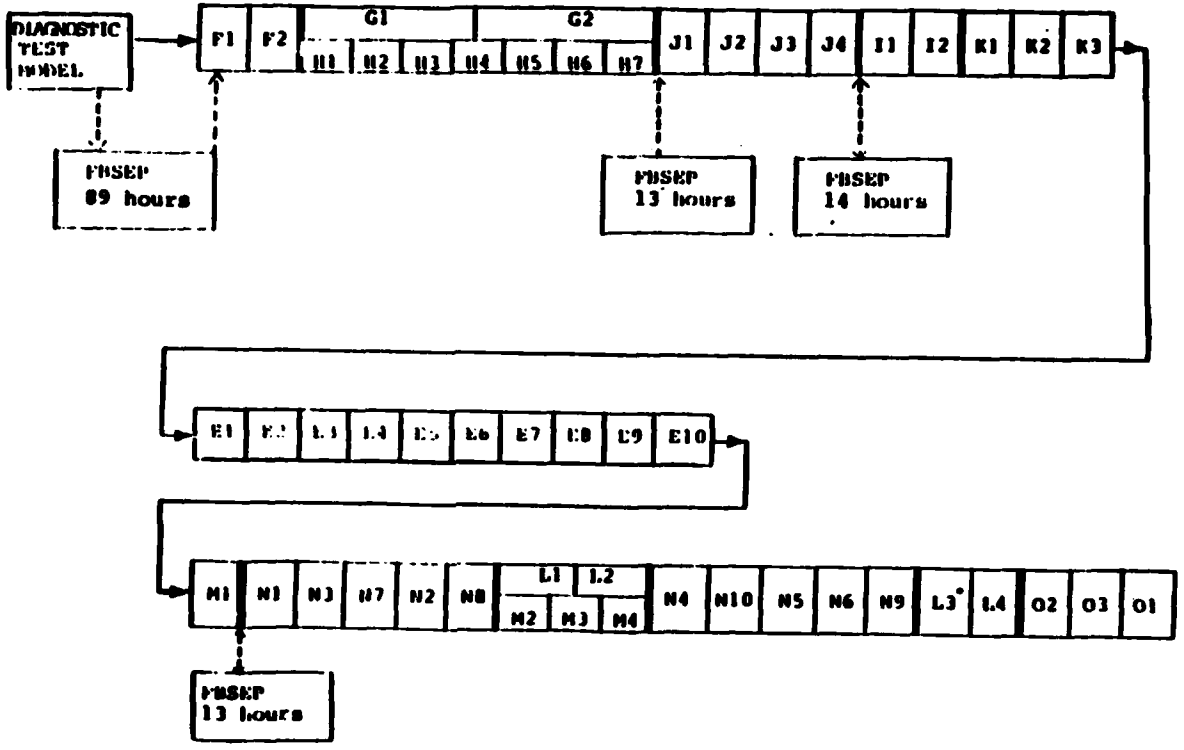


Figure 1. Integration of FBSEP and AIT Lessons.

unit by telephone prior to 0800 hours each day. On the morning beginning the fourth consecutive day of absence the roster will identify the student for category X status.

9. When a student completes Functional BSEP training, he will be returned to the course records section with the appropriate control slip and a statement of completion of prescribed training.

10. Those students identified as untrainable, unsuited or considered as non-desirable candidates in Functional BSEP shall be returned to the course with suitable documentation to include counseling statement, academic records, attendance records and any other pertinent material along with detailed explanation supporting the recommendations of the FBSEP department.

Administration

1. Students will be assigned to an instructor by the scheduling section of the Army Education Center. The instructor will receive a FBSEP Lesson Prescription form with a list of lessons that have been prescribed for the student. An enrollment roster of the students to be enrolled in FBSEP sections will also be given to the appropriate instructor.

2. Training materials, such as student guides, instructional aids, student supplies, reference materials and forms will be requisitioned through AEC channels by the BSEP coordinator.

3. The progress of all students assigned to an instructor will be documented by that instructor. A record will be maintained by the instructor (see Appendix B) on each student. This record, called the Student Progress Report, will document the

student's performance in class, test results and time, and reasons for counseling. Each counseling session will be documented by a counseling statement. At diagnostic testing the student will fill out the demographic portion of Form DA669, Record of Counseling. The DA669 will be maintained in the Army Education Center records section.

Student Loading Limits

To estimate the number of students who would need FBSEP instruction, a tally was made of the incorrect responses of a sample of students to each item on the Diagnostic Test. Data from sixty-five students from two weeks input to the 05C AIT course (January 18 and 25) were analyzed. The incorrect responses were recorded and a count was made of the number of hours of FBSEP instruction needed by each student. Their data are presented in Table 1.

TABLE 1

PERCENT AND NUMBER OF STUDENTS NEEDING FBSEP INSTRUCTION

Total Hours Needed	Percent of Students	Number of Students	
		Average Class (N=70)	Maximum Class (N=140)
0-25	30	21	42
26-50	45	32	63
51-75	15	11	21
76-100	7	5	10
101-125	3	2	4

Along with the percent of students needing the listed number of hours of instruction, the number of students in an average class load (N=70) and a maximum class load (N=140) are given. To determine the numbers representing 50% loading (i.e. N=35), take one-half of the figures listed for N=70.

Since 69 percent (or 89 of 129 hours) of the FBSEP course is front-loaded and the remaining 30 percent is spread out into three additional segments, it is helpful to examine the student loading for the first portion of instruction. This information is given in Table 2.

TABLE 2

PERCENT AND NUMBER OF STUDENTS NEEDING

FRONT-LOADED FBSEP INSTRUCTION

Hours Needed	Percent of Students	Number of Students Average Class (N=70)	Number of Students Maximum Class (N=140)
0	3	2	4
1-20	23	16	32
21-40	42	29	59
41-60	23	16	32
61-80	8	6	11
over 80	1	1	1

For an average class of 70 students, only two would need none of the front-loaded instruction; sixteen students would be finished with this segment of FBSEP in 20 hours and another 29 students would be finished in a week. Only 22 students would take longer than one week and one would need more than two weeks of instruction at this point. However, when the 05C AIT course reaches a maximum of 140 students, all of these figures would double and 43 students would be continuing with FBSEP front-loaded instruction when the next week's group of students entered the course. To show what would happen under these conditions, Table 3 is presented.

TABLE 3

MAXIMUM FRONT-LOADING WITH LARGE INPUTS FOR THREE WEEKS

(WORST POSSIBLE CONDITION)

Hours Needed	Week 1 New Students N=140	Week 2 New Students N=140		Week 2 New Students + Week 1 Continuing	Week 3 New Students N=100		Week 3 New Students + Week 2 Continuing
0	4	4			3		
1-20	32	32	+	32 = 64	23	+	33 = 56
21-40	59	59	+	11 = 70	42	+	11 = 53
41-60	32	32	+	1 = 33	23	+	1 = 24
61-80	11	11	+	11	8	+	8
over 80	1	1		1	1		1
		TOTAL:		179	TOTAL:		142

Note that Table 3 gives the maximum likely number of students going through the FBSEP course with inputs of 140 students for two weeks in a row and 100 students for the third week. If this occurred, the students continuing on from the first week would be going through the course with the new input of students. Thirty-two of the first week students continuing would need up to 20 additional hours and 11 would need up to 40 more hours and 1 student slightly more than 40. Therefore, these students from Week 1 would be added to the appropriate groups of students for Week 2, as shown in Table 3. This is also shown for Week 3. Thus, under the worst possible condition, for at least half a week, you might have as many as 179 students in front-loaded FBSEP instruction. For the remainder of the week, a maximum of 115 (179-64) would be possible. While the maximum loading shown in Table 3 is possible, the more typical condition would be that shown in Table 4.

TABLE 4

AVERAGE FRONT-LOADING WITH TYPICAL INPUTS FOR THREE WEEKS

(USUAL CONDITION)

Hours Needed	Week 1 New Students N=70	Week 2 New Students N=70		Week 2 New Students + Week 1 Continuing	Week 3 New Students N=70		Week 3 New Students + Week 2 Continuing
0	2	2			2		
1-20	16	16	+	16 = 32	16	+	17 = 33
21-40	29	29	+	6 = 35	29	+	6 = 35
41-60	16	16	+	1 = 17	16	+	1 = 17
61-80	6	6		6	6		6
over 80	1	1		1	1		1
		TOTAL:		91	TOTAL:		92

Under the typical condition of 70 students per week entering the AIT course there would be no more than 92 students needing instruction in any week and this number should drop to 59 (92-33) after 20 hours of instruction.

To examine the student loading for each lesson or group of lessons taken by a group of students, refer to Table 5. Each line contains a lesson or group of lessons that is assigned on the basis of the Diagnostic Test total score, group of items or single item. These data are based on the sample of 65 students, except for the single items which were obtained from $\underline{q}$ values (percent incorrect) from the entire sample of 325 students.

TABLE 5

PERCENT OF STUDENTS NEEDING INSTRUCTION ON EACH FBSEP LESSON OR GROUP OF LESSONS

Position of Lesson	Lesson Number	Hours of Instruction	Percent of Students
Front Loaded	A01	1	100
	A02-A06, B-17-B-21	21	11
	B01	2	45
	B02	1	45
	B05	1	31
	B08	2	57
	B09	2	29
	B12-B16	10	83
	B22-B27	11	45
	B28-B30	6	68
	B31	4	40
	B32	4	14
	B33	4	22
	C01	1	33
	C02	1	22
	C03	1	6
	C04	1	48
	C05-C07	3	46
	C08	3	45
	C09	4	35
	C10	2	18
	D01-D04	4	18
After H7	A07-A09	13	11
After J4	B03	2	45
	B04	2	45
	B06	2	42
	B07	3	11
	B10	2	48
	B11	3	11
After M1	D05	1	18
	D06	1	28
	D07	1	41
	D08	1	78
	D09	2	20
	D10	1	42
	D11	2	45
	D12	1	29
	D13	1	48
	D14	2	50

Facility, Equipment, and Instructor Requirements

To accomodate the anticipated student load and to provide for both group and self paced instruction, an estimate of equipment, facilities and instructors needed for FBSEP is presented in Table 6. The following discussion is based on average student loading unless otherwise specified. However, Table 6 also gives the data for maximum loading of 140 students and 50% loading, representing 35 students, and should be consulted for this information.

All FBSEP instruction will take place in one area. Table 4 indicates that under the typical condition of 70 students, at most 92 students would need front-loaded instruction in any one week. In addition, students requiring FBSEP instruction during the course of the 05C program (i.e. after H7, J4, and M1) will arrive not as a group but at different times. For this reason, the student loading for these three points is not given in Table 6. It should also be understood that the student loads that are listed in Table 6 reflect repeats. For example, it is probable that some of the 8 students (using N=70) requiring A-02 through A-05 may also be part of the 31 students requiring B-22, and so on, for each of the figures given.

For optimum use of the six FBSEP instructors, four to six classrooms are required. Two of these should be set aside for self paced instruction; two to four for group paced. Part of one of the self paced classrooms can accommodate the self paced lessons utilizing audio tapes; six audio cassette players are necessary for this purpose. Each of the group paced classrooms requires an overhead projector and one of these classrooms also needs the radio equipment necessary for B-32 and B-33. The prescribed radio equipment is Radio Set AN/PRC-77, Radio Set AN/GRC-106 including Amplifier AM-3349 and Receiver-Transmitter RT-834, and Radio Set AN/VRC-46 consisting of Receiver-Transmitter RT-524

TABLE 6

ESTIMATES OF EQUIPMENT, FACILITIES AND INSTRUCTORS FOR FBSEP

Placement of Instruction	Lesson	Hrs	Equipment	Student Load 50% N=35	Avg. N=70	Max. N=140
Front-loaded	A-01	1	Overhead Projector	34	68	136
	A-02-A-05	5	Overhead Projector	4	8	15
	B-22	2	Overhead Projector	16	31	63
	B-32	4	Overhead Projector Radio Equipment	5	10	20
	B-33	4	Overhead Projector Radio Equipment	8	15	31
	C-01	1	Overhead Projector	12	25	49
	C-02	1	Chart	12	23	46
	C-05-C-08	6	Audio Cassette Player	16	32	64
	C-09	4	Overhead Projector	12	25	49
	C-10	2	Overhead Projector	6	13	25
	Self paced	59	none	1-29	1-58	1-116
After H7	A-09	6	Overhead Projector	4	8	15
	Self paced	7	none			
After J4	Self paced	14	none			
After M1	Self paced	13	none			

TOTALS:		
	Instructors	6
	Classrooms	4-6
	Work stations	1
	Overhead projectors	4
	Audio Cassette Players	6
	AN/PRC-77	1
	AN/GRC-106	1
	AN/VRC-46	1

Lesson A-01 is to be taken by the student just before he is assigned his first FBSEP lesson.

The number of students indicated for A-01, under the front-loaded section of Table 6, is probably too high since this lesson will be taken by students at a later time if they do not require any front-loaded instruction.

Table 6 is based on the assignment of students to FBSEP if they do not meet the standards for any group of items on the Diagnostic Test. However, if the criterion for assignment of students to FBSEP were changed to a lower standard, the student loading limits in Table 6 would be reduced. For example, if only 50% of an incoming class were assigned to FBSEP, all the numbers in Table 6 would be halved.

An instructor work station of not less than 150 square feet, and containing a desk or table, is also required in the FBSEP instruction area. This station will provide storage for training materials and will serve as a counseling facility.

In summary, the FBSEP course requires: 6 instructors, 4-6 classrooms, 1 instructor work station, 4 overhead projectors, 6 audio cassette players, and 1 each of radio sets AN/PRC-77, AN/GRC-106, and AN/VRC-46.

II. INSTRUCTOR QUALIFICATIONS

Instructor personnel will be required to possess a B.A. or B.S. degree in the field of education (or a related discipline), or the equivalent in experience as an instructor in a formal training program or a combination of the two. Applicant's experience must be of a progressively responsible nature with involvement in the developmental and implementation phases of training. Preferred candidates would have an advanced degree in the field of education (or a related field), experience as a military instructor and knowledge of signal communications. Experience as defined above can be substituted at the rate of 3 years of experience for 1 year of undergraduate study.

III. SEQUENCING OF INSTRUCTION

This section of the Course Management Plan describes how we propose to integrate basic skills lessons with 05C AIT lessons. An overview of the current instructional system and the proposed modifications of that system to accommodate FBSEP will be helpful in understanding the sequencing of FBSEP lessons with AIT lessons.

The 05C AIT course is divided into 10 annexes., each consisting of from one to six lessons. (The end of annex test is usually designated the last lesson in the annex.) The first annex is F and the final annex is O. In the first lesson, F-01, the student receives an orientation to the course. He then proceeds through the course at his own speed, using self-instructional materials. At the end of each lesson and at the end of each annex, the student is tested. Annex O includes a comprehensive final test conducted in the field.

It is recommended that FBSEP be integrated with the 05C AIT course in the following manner. Before receiving the orientation to the course (F-01), the student will take the FBSEP Diagnostic Test in order to identify the specific basic skills in which he is deficient. If the student meets the standards for a particular basic skill on the Diagnostic Test, he would be allowed to start the 05C AIT lesson for which that basic skill is a prerequisite competency. If the student fails to meet the standards for a particular basic skill, he would undergo remedial training within FBSEP. When he completes a particular FBSEP lesson he would take the FBSEP lesson test for that lesson. If he meets the standards set for the FBSEP lesson test, he would advance to the appropriate 05C AIT lesson which the lesson supports. If he fails the lesson test, he would undergo more remedial training and the cycle is repeated.

In the present plan the standard is set high enough so that students who need training in a particular basic skill will be picked out by their Diagnostic Test scores. However, if the standards were lowered, it would be more likely that some students would not be able to pass an AIT lesson due to a deficiency in a basic skill. In this case, if a student fails an AIT lesson the student's relevant Diagnostic Test questions should be re-examined by the FBSEP instructor to see if it is appropriate to cycle him through the necessary FBSEP lessons.

It should be noted that while the Diagnostic Test is given in the first week of training, the particular 05C AIT lessons for which a student may lack prerequisite competencies may occur many weeks later. This requires that an accurate record be kept of the student's deficiencies and that the student's record be "flagged" in order to ensure that remedial (FBSEP) training will be provided when appropriate.

Figure 1 shows the integration of FBSEP and 05C AIT lessons. After taking the Diagnostic Test and Student Questionnaire, students are assigned to the necessary basic skills lessons. As can be seen from the figure there are four groups of FBSEP lessons.

1. Front loaded. Eighty-nine hours of FBSEP instruction are planned to be given before the start of the AIT course.
2. After H7: 13 hours of FBSEP
3. After J4: 14 hours of FBSEP
4. After M1: 13 hours of FBSEP

Table 7 gives the FBSEP lesson numbers that are to be taken at each of the four intervals. In Table 7 FBSEP lessons that are listed together on a line will be given to the same group of students on the basis of their Diagnostic Test scores, on the total test or individual items, or groups of items. A-02 to A-06 (study skills lessons) and B-17 to B-21 (on concept formation) will be given to all students who fall below a certain level on the Diagnostic Test. After AIT lesson H-07, FBSEP lessons A-07 to A-09 will be taken by these same students. Again, after J-04, lesson B-11 is given to the students with low total test scores.

For each of administration sixty-nine percent of the FBSEP instruction has been placed before the AIT course.

A group of lessons in D Annex are inserted late in the course (after M1) because they support material that occurs late in the AIT course.

A-01, which explains the purpose of the FBSEP instructional program, is unique in that it is designed to be a front-loaded, group paced lesson given to students requiring A-02 through A-05, and to be a self paced lesson given to other students at any point in the schedule where they begin their FBSEP training.

Refer to Table 8 to identify independent lessons. Each FBSEP lesson is listed by number and title and if there is a pre-requisite for the lesson it is given in the last column. Any lesson that has no prerequisite listed is independent and can be taken without having had a previous FBSEP lesson.

Lessons A-02 to A-06 are given as a group (as indicated in Table 7) to students who score below a cut-off score on the Diagnostic Test. However, since lesson A-06 has no prerequisite listed, it would be possible to assign a student to lesson A-06, without his having had lessons A-02 to A-05. This might occur if a student's Diagnostic Test score was not low enough for him to be assigned to this set of lessons, but after starting the AIT course he had trouble with the material on prowords and was then given A-06 to help him in this area.

Later in the course students are assigned to lesson A-07 through A-09 (as indicated in Table 7). Again, referring to Table 8, we see it would be possible for a student to be assigned to lesson A-09 without his having had A-07 or A-08.

In summary, Table 7 gives the sequencing of FBSEP lessons, with lessons listed on a single line being assigned to students as a group. Table 8 lists the independent lessons (no prerequisites) which could be assigned to a student on an individual basis perhaps because the student was having difficulty with an AIT lesson. If a lesson has a prerequisite, the prerequisite lesson or lessons must be taken first.

Table 8 also gives other data relevant to course management. It details the mode of delivery (self or group paced) and the media prescribed; it lists any additional materials required; it notes the time estimated for completion of each lesson; and it cites the standard the student must meet to successfully complete the lesson.

TABLE 7

SEQUENCING OF FBSEP AND 05C10 AIT LESSONS

FBSEP Lessons		AIT Lessons
A-01		
A-02-A05, A-06, B-17-B-21		
B-01		
B-02		
B-05		
B-08		
B-09		
B-12-B-16		
B-22-B-27		
B-28		
B-29		
B-30		
B-31		
B-32		
B-33		
C-01		
C-02		
C-03		
C-04		
C-05-C-07		
C-08		
C-09		
C-10		
D-01		
D-02		
D-03		
D-04	→	F-01, F-02
		G-01, G-02
	←	H-01-H-07
A-07-A-09	→	
	←	J-01-J-04
B-03		
B-04		
B-06		
B-07		
B-10		
B-11	→	
		I-01, I-02
		K-01-K-03
		E-01-E-10
	←	M-01

Continued on next page

TABLE 7 (cont'd)

FBSEP LESSONS	AIT LESSONS
←	Continued from page 19
D-05	
D-06	
D-07	
D-08	
D-09	
D-10	
D-11	
D-12	
D-13	
D-14	
→	N-01-N-03
	N-07, N-08
	L-01, L-02
	M-02-M-04
	N-04-N-06
	N-09, N-10
	L-03, L-04

TABLE 8

SUMMARY OF DATA REGARDING FBSEP LESSONS

ANNEX A

FBSEP LESSON	PREREQUISITES	MEDIUM	MATERIALS	HOURS	STANDARDS
A-01 Understanding FBSEP		GP & OT or SP		1	No Test
A-02 Identifying Parts, Functions and Sequence in Lesson Study Guide		GP & OT		1	15/18 (83.3%)
A-03 Identifying Training Aids and Devices Used in Course	A-02	GP & OT		1	5/6 (83.3%)
A-04 Identifying Parts, Functions and Sequence Across Lessons	A-02, A-03	GP & OT		2	8/10 (80%)
A-05 Understanding the Instructional System	A-02, A-03, A-04	GP & OT		1	24/26 (81%)
A-06 Memorizing Meanings of Prowords		SP		3	26/30 (86.6%)
A-07 Memorizing Meanings of Prosigns		SP		4	25/27 (92.5%)
A-08 Identifying Relationships Between Prowords and Prosigns		SP		3	39/48 (81%)
A-09 Comparing and Contrasting Radio and Teletype Procedures		GP & OT		6	13/16 (81.2%)

GP = group paced
SP = self paced

AT = audio tape
OT = overhead transparencies

TABLE 8

SUMMARY OF DATA REGARDING FBSEP LESSONS

ANNEX B

FBSEP LESSON	PREREQUISITES	MEDIUM	MATERIALS	HOURS	STANDARDS
B-01 Identifying the Organizing System of a Soldier's Manual		SP		2	8/10 (80%)
B-02 Using the Organizing System in the Soldier's Manual		SP	FM 11-05C1/2	1	10/12 (83.3%)
B-03 Identifying the Organizing System of a Technical Manual		SP		2	11/12 (91.6%)
B-04 Using the Organizing System in a Technical Manual		SP	TM 11-5820-520-12	2	7/8 (87.5%)
B-05 Finding Information in a Table of Contents		SP		1	5/6 (83.3%)
B-06 Finding Information in an Index		SP		2	5/6 (83.3%)
B-07 Finding information in Text		SP	FM 11-05C1/2; TM 11-5805-262-12	3	5/6 (83.3%)
B-08 Finding Information in an Illustration		SP		2	4/5 (80%)
B-09 Finding Information in Tables		SP		2	8/9 (88.8%)
B-10 Finding Information in Diagrams		SP		2	8/9 (88.8%)

GP = group paced
SP = self paced

AT = audio tape
OT = overhead transparencies

TABLE 8

SUMMARY OF DATA REGARDING PBSEP LESSONS

ANNEX B (Cont.)

PBSEP LESSON	PREREQUISITES	MEDIUM	MATERIALS	HOURS	STANDARDS
B-11 Finding Information in Manuals		SP	TM 11-5805-262-12	3	9/10 (90%)
B-12 Matching Terms with Their Definitions		SP		2	18/20 (90%)
B-13 Matching Terms with Their Definitions	B-12	SP		2	18/20 (90%)
B-14 Matching Terms with Their Definitions	B-12, B-13	SP		2	18/20 (90%)
B-15 Matching Terms with Their Definitions	B-12, B-13, B-14	SP		2	18/20 (90%)
B-16 Matching Terms with Their Definitions	B-12, B-13, B-14, B-15	SP		2	19/21 (90.4%)
B-17 Integrating Information to Form Concepts: Net, CEOI		GP & OT		3	36/42 (85.7%)
B-18 Integrating Information to Form Concepts: Message, Radio Sets, Teletypewriter Sets	B-17	SP		4	46/58 (79.3%)
B-19 Integrating Information to Form Concepts: Antenna, Generator	B-17	SP		2	27/34 (79.4%)

GP = group paced
SP = self paced
AT = audio tape
OT = overhead transparencies

TABLE 8

SUMMARY OF DATA REGARDING FBSEP LESSONS

ANNEX B (Cont.)

FBSEP LESSON	PREREQUISITES	MEDIUM	MATERIALS	HOURS	STANDARDS
B-20 Integrating Information to Form Concepts: Security, ECM/ECCM	B-17	SP		2	28/35 (80%)
B-21 Integrating Information to Form Concepts: Operator and Maintenance MOS, Manuals	B-17	SP		2	31/39 (79.4%)
B-22 Comprehending Reading Passages on Topics Related to Radio Teletype Communication	B-17	GP & OT		2	See B-27
B-23 Comprehending Reading Passages on Topics Related to Radio Teletype Communication	B-18, B-22	SP		2	See B-27
B-24 Comprehending Reading Passages on Topics Related to Radio Teletype Communication	B-19, B-22	SP		2	See B-27
B-25 Comprehending Reading Passages on Topics Related to Radio Teletype Communication	B-20, B-22	SP		2	See B-27

GP = group paced
SP = self paced

AT = audio tape
OT = overhead transparencies

TABLE 8

SUMMARY OF DATA REGARDING FBSEP LESSONS

ANNEX B (Cont.)

FBSEP LESSON	PREREQUISITES	MEDIUM	MATERIALS	HOURS	STANDARDS
B-26 Comprehending Reading Passages on Topics Related to Radio Teletype Communication	B-21, B-22	SP		2	See B-27
B-27 Comprehending Reading Passages on Topics Related to Radio Teletype Communication	B-22 - B-26	SP		1	13/15 (86.6%)
B-28 Deciding If Information Is Missing In A Message		SP		2	5/6 (83.3%)
B-29 Deciding If Information In A Message Is In Error		SP		2	5/6 (83.3%)
B-30 Detecting Problems In Messages		SP		2	4/5 (80%)
B-31 Finding Information in Illustration Using Text		SP		4	4/5 (80%)
B-32 Identifying Parts of Equipment Using Illustration		GP & OT	* AN/PRC-77 AN/GRC-106 inc. AN-3349/GRC RT-834/GRC AN/VRC-46 i.e. RT-524/VRC	4	4/5 (80%)
B-33 Performing a Procedure Using Illustration/Text		GP & OT		4	11/13 (84.6%)

GP = group paced
SP = self paced

AT = audio tape
OT = overhead transparencies

* applies to B-32 and B-33

TABLE 8

SUMMARY OF DATA REGARDING FBSEP LESSONS

ANNEX C

FBSEP LESSON	PREREQUISITES	MEDIUM	MATERIALS	HOURS	STANDARDS
C-01 Tracing Letters and Numbers in a Lettering Chart		GP & OT	Tracing Paper (Grease Pencil for Instructor)	1	4/4 (100%)
C-02 Pronouncing Letters and Numbers in a Phonetic Alphabet Chart		GP & Chart		1	34/36 (94.4%)
C-03 Arranging Single Letters in Alphabetical Order		SP		1	3/3 (100%)
C-04 Arranging Letter-Number-Letter Groups in Alphanumeric Order		SP		1	4/5 (80%)
C-05 Spelling Commonly Used Military Words		SP & AT		1	26/30 (86.6%)
C-06 Spelling Commonly Used Military Words	C-05	SP & AT		1	26/30 (86.6%)
C-07 Spelling Commonly Used Military Words	C-05, C-06	SP & AT		1	26/30 (86.6%)
C-08 Printing Text of Message Presented Orally		SP & AT		3	80% on each of 7 messages
C-09 Filling Out Forms		GP & OT		4	18/20 (90%)
C-10 Reading Aloud Text of Printed Message		GP & OT		2	80% on each of 3 messages

GP = group paced
SP = self paced
AT = audio tape
OT = overhead transparencies

TABLE 8

SUMMARY OF DATA REGARDING FBSEP LESSONS

ANNEX D

FBSEP LESSON	PREREQUISITES	MEDIUM	MATERIALS	HOURS	STANDARDS
D-01 Changing Civilian Time to Military Time		SP		1	5/6 (83.3%)
D-02 Adding Hours to Military Time		SP		1	4/5 (80%)
D-03 Subtracting Hours from Military Time		SP		1	4/5 (80%)
D-04 Adding or Subtracting Hours Moving Across Days		SP		1	8/10 (80%)
D-05 Adding Two Numbers Which Contain Decimals		SP		1	4/5 (80%)
D-06 Subtracting Two Numbers Which Contain Decimals		SP		1	4/5 (80%)
D-07 Finding 10% of a Number		SP		1	8/10(80%)
D-08 Finding Numbers Which are 10% Above and Below a Given Number		SP		1	8/10 (80%)
D-09 Multiplying a 5-digit Number by a 1-digit Number		SP		2	4/5 (80%)
D-10 Subtracting 5 or 6-digit Numbers		SP		1	4/5 (80%)
D-11 Dividing 7-digit Numbers by 6-digit Numbers		SP		2	4/5 (80%)

GP = group paced
SP = self paced

AT = audio tape
OT = overhead transparencies

TABLE 8

SUMMARY OF DATA REGARDING FBSEP LESSONS

ANNEX D (Cont.)

FBSEP LESSON	PREREQUISITES	MEDIUM	MATERIALS	HOURS	STANDARDS
D-12 Rounding off a Number Containing Two Decimal Places to the Nearest 10th		SP		1	5/6 (83.3%)
D-13 Dividing 468 by a Number Containing a Decimal		SP		1	4/5 (80%)
D-14 Dividing 468 by a Number Containing a Decimal and Rounding-off the Answer to the Nearest 10th		SP		2	4/5 (80%)

GP = group paced
SP = self paced

AT = audio tape
OT = overhead transparencies

IV. TEACHING STRATEGIES

This section of the Course Management Plan will explain the teaching strategies used in the Functional Basic Skills Education Program lessons. Teaching strategies are the external conditions which are arranged by the education specialist or the instructor to activate the internal processing of the learner. A separate section will deal with learning strategies, although they are interrelated.

There are two different types of lessons in the package: (1) self paced and (2) group paced. First the teaching strategies for the self paced lessons will be described, and then we will consider how the group paced lessons differ from the self paced lessons.

Self paced Lessons

There is one Learning Supervisor Guide for all the self paced lessons and a Student Guide for the student and the instructor for each lesson.

Learning Supervisor Guide

The Learning Supervisor Guide lists the procedures that the instructor is to follow in managing the lesson. It includes information on materials and directions the instructor is to give to the student, additional assistance to be given to the student, assessment of the student, and decisions regarding the results of assessment. Information contained in the Student Guide is not repeated in the Learning Supervisor Guide so the instructor must be thoroughly familiar with the Student Guide as well.

In addition to the Learning Supervisor Guide the instructor will have access to the following tests and answer keys.

1. Lesson Test
2. Answer Key for the Lesson Test
3. Remediation Test
4. Answer Key for Remediation Test

Student Guide

Each Student Guide has the same arrangement of parts so the student will benefit from a continuity when proceeding from one lesson to another. Once the student has taken one lesson, he will have expectations for other lessons which should help him in processing the material to be learned. The parts of the Student Guide will be explained in terms of the teaching strategies employed and are given in the order in which they appear in the lesson.

The parts of the Student Guide are listed below. Each numbered section, as well as each example, starts a new page.

1. Cover Page
2. Introduction
3. Annex Map
4. Objective (and Generality)
5. Presentation (with Examples)
6. Summary and Practice
7. Practice Exercise
8. Answers to Practice Exercise
9. Explanations for Practice Exercise
10. Obtain Lesson Test from Instructor
11. Remediation
12. Remediation Exercise
13. Answers to Remediation Exercise
14. Explanations for Remediation Exercise
15. Obtain Remediation Test from Instructor

Cover Page. This page has three components.

1. Logo. The Signal Corps insignia consisting of crossed flags and torch emblem has been chosen as the logo appearing at the top of the cover page for all the Student Guides (and Learning Supervisor Guides). Using this logo for each lesson in FBSEP is an attention gaining device that provides contrast to the verbal material in the lesson.

2. Title. Below the emblem, the label STUDENT GUIDE along with the lesson number and title is given.

3. Requirements. In the left-hand corner there is a listing of: (a) prerequisites, (b) materials required, and (c) type of lesson (e.g. self paced). This material provides guidelines for the student before he starts the lesson and prevents him from going through a lesson without the necessary prerequisites or materials.

Introduction. This is a brief statement of what the student will learn in the lesson. A rationale is given to the student for why it is necessary to know this material and how it is related to the AIT course. The FBSEP lesson is placed in the sequence of other FBSEP lessons by showing where it is located on the annex map (or hierarchy chart) that follows the introduction. Students are directed to ask for a previous lesson if they need some additional basic information.

Annex Map. Each lesson belongs to one of the four annexes: A. Study Skills, B. Reading Skills, C. Language Skills, or D. Math Skills. For each annex there is an annex map or hierarchy chart which shows how one lesson is related to another in the hierarchy. In order to relate the lesson to be taught to the other lessons in the annex, the appropriate annex map is given in the lesson with an arrow pointing out the lesson to be taught.

Objective and Generality. These appear on the same page, after the annex map page. The objective is addressed to the student and tells him what he will be able to do when he finishes the lesson. Following this the generality of the lesson is stated in a box to set it apart. A generality is a concise statement or listing of what will be learned in the lesson. Depending on what is being taught in the lesson, the generality may name the information to be learned, list critical characteristics of a concept or give the steps necessary to perform the objective.

Presentation. This section gives a detailed explanation of the material to be learned. It might be presented in steps or in some other logical arrangement, depending on the material being taught. This section will be discussed in more detail when the learning strategies are explained.

Examples. After the presentation, examples are given that follow from the explanation. Each example starts on a new page.

Summary and Practice. The lesson is summarized and the student is given an opportunity to practice what he has learned. This section includes:

1. a restatement of the generality
2. an introduction to the Practice Exercise section
3. an explanation of the purpose of:

    a. Answers to Practice Exercise
    b. Explanations for Practice Exercise

4. an explanation of obtaining:

    a. help from the instructor
    b. the Lesson Test

Following the explanation to the student, practice consists of three sections, each clearly labeled and each starting on a separate page.

1. Practice Exercise. This is one or more sets of problems to be worked or questions for the student to answer.
2. Answers to Practice Exercise.
3. Explanations for Practice Exercise. If the student has missed any of the questions, he has been directed to study the relevant material in this section for the questions he has missed.

Obtain Lesson Test from Instructor. This directive is placed on a single page so that it stands out. We can then be reasonably sure that the student will ask for the lesson test rather than proceed through the remediation.

Lesson Test. The test is provided by the instructor. Directions are given to the student to write his answers on a separate sheet of paper. He is told how much credit is given for each correct answer and how many answers he must get correct to pass the test. (The Answer Key will be kept in a secure place by the instructor.) If the student passes the test, this is the end of the lesson for him.

Remediation. If the student does not pass the lesson test, he will be directed to this section of the lesson. Here the student will be given an explanation of remediation and told to try the exercise that follow. The availability of the instructor for additional help is emphasized. A review or summary of the lesson is presented. Paralleling the practice sections of the lesson, the following are included.

1. Remediation Exercise. This is similar to the Practice Exercise section.
2. Answers to Remediation Exercise.
3. Explanations for Remediation Exercise.

Obtain Remediation Test from Instructor. Again, this directive is placed on a single page so that the student will stop and ask for the test.

Remediation Test. This test is given to the student by the instructor and is a parallel form of the Lesson Test. The Answer Key is provided to the Instructor.

Group paced Lessons

Although the flexibility of the self paced lesson makes it the preferred mode of instruction for FBSEP, there are situations where group paced lessons provide certain advantages. Some of the basic skills objectives require the personal feedback of the instructor during practice and testing and others require interaction during the presentation of the lesson. These are the lessons that are group paced.

The teaching strategies described for the self paced lessons have many similarities to the strategies of the group paced lessons, but there are some important differences. These differences will now be described.

Learning Supervisor Guide

In the group paced lessons, the Learning Supervisor Guide contains the bulk of the lesson rather than just directions for the instructor. The following are the sections of this guide.

1. Cover Page
2. Introduction
3. Presentation
4. Summary and Practice
5. Practice Exercise
6. Lesson Test
7. Remediation Exercise
8. Remediation Test

Introduction. This section relates the lesson to other lessons in the annex by means of the annex map. It states the reason for the lesson and gives the objective and generality. Then the instructor is directed to distribute the Student Guides.

Presentation. For the group paced lessons the Presentation section is now in the Learning Supervisor Guide rather than the Student Guide.

Summary and Practice. Directions are given to the Instructor for eliciting a summary of the lesson from the students. Then the students are told to read their Student Guide before taking the Practice Exercise which follows.

Sections five through eight above are given in the form of directions and administrative instructions dealing with practice and student testing.

Tests and answer keys are kept separately just as they are for the self paced lessons.

Student Guide

Students use their guides for review and practice in the group paced lesson. There are no Presentation, Summary, or Explanation for Practice or Remediation Exercises sections. It is the responsibility of the instructor to present the material to be learned and to give explanations for the exercises.

Usually the student will be directed to his Student Guide after the instructor has completed his presentation. However, for some lessons it is necessary for the students to use their guides in conjunction with the lesson presentation. While there is no Summary section in the Student Guide, the Generality, outlined by a box, fulfills this need.

The sections of the Student Guide for group paced lessons are the following.

1. Cover
2. Introduction
3. Annex Map
4. Objective (and Generality)
5. Practice Exercise
6. Answers to Practice Exercise
7. Remediation Exercise
8. Answers to Remediation Exercise

V. LEARNING STRATEGIES

Learning strategies are the techniques used by students which help them to acquire, process, store and retrieve information. The FBSEP lessons are structured so that particular learning strategies are arranged for the student to help him learn the material. Depending on the material to be learned, a variety of strategies are used. This section will explain the strategies used in each lesson or group of lessons in the learning package. In the section on teaching strategies, those techniques which are common to all the group paced and self paced lessons are explained.

Annex A: Study Skills

LESSON NO.	LESSON TITLE	MEDIUM	PREREQUISITE
A-01	Understanding FBSEP	GP & OT* or Self Paced	
A-02	Identifying Parts, Functions, Sequence in the Lesson Study Guide	GP & OT	
A-03	Identifying Training Aids & Devices used in the Course	GP & OT	A-02
A-04	Identifying Parts, Functions, Sequence across Lessons	GP & OT	A-02, A-03
A-05	Understanding the Instructional System	GP & OT	A-02, A-03, A-04
A-06	Memorizing Meanings of Prowords	Self Paced	
A-07	Memorizing Meanings of Prosigns	Self Paced	
A-08	Identifying Relationship between Prowords and Prosigns	Self Paced	
A-09	Comparing & Contrasting Radio and Teletype Procedures	GP & OT	

* GP - Group Paced
  OT - Overhead Transparency

Lesson A-01 is unique in that it is presented in both the self paced and group paced mode. For those students requiring A-02 through A-05, A-01 is presented prior to and in the same format as those lessons, i.e. group paced utilizing overhead transparencies For those students requiring only a few individual FBSEP lessons, A-01 is designed as a self paced lesson to be administered at the point at which these students begin FBSEP training. The following learning strategies apply to both modes of delivery.

1. Advance organization. The Introduction discusses the sequence of FBSEP and AIT lessons, the organization of the Study Skills Annex, and where this particular lesson fits into both. The objective and generality of the lesson are stated in order to prepare the students for what is coming within the lesson.

2. Motivation. The purpose and scope of FBSEP and its relationship to the 05C AIT Course is stressed. Knowing how students are selected for FBSEP instruction and how it will help their performance in AIT lessons aids the students in developing a positive attitude toward FBSEP.

3. Acquisition. In the group paced format, transparencies are used to gain the attention of the students; the instructor is supplied with a group of questions which solicit active student participation. In the self paced mode, printed visuals are used. The correlation of FBSEP with AIT is explored by relating it to familiar similar situations.

4. Drill and Practice. The Summary and Practice section reviews the objective and generality. The Practice Exercise sections give the student the opportunity to evaluate themselves on how well they have learned the lesson. There is no test for A-01.

Lessons A-02 to A-05

Study skills lessons are assigned to students who score very low on the Diagnostic Test as a whole. The purpose of these lessons is to aid the student to understand how the AIT course will be presented and what will be expected of him. The following learning strategies are used in this group of lessons.

1. Advance organization. Right from the start students are told about the four lessons in this group and how they relate to each other. This helps them to prepare for the material to be presented. In addition, for each lesson the objective tells the student what he is expected to learn so that he will have the proper set in going through the lesson.

2. Motivation. When students know why they must learn the lessons given them they become more receptive to learning. Here the students are motivated to learn by telling them that these lessons will help them in the AIT course.

3. Visual processing. Transparencies are used with an overhead projector so the entire class can focus on the points being discussed. This helps to gain the attention of the student. Many of these transparencies contain visual material which facilitates learning by providing another way of storing material for later recall.

Hierarchy charts provide the student with a visual presentation of the material for storage and also organize the material for him.

Arrows are used at points during the lesson to call the student's attention to parts that are being discussed or stressed.

4. Active participation. During the presentation by the learning supervisor the students are given an opportunity to interact with the instructor. Students are asked to respond to the material being discussed, and questions are asked. This enables the student to process and store the information as he fits it into his own cognitive structure. Practice is also provided for the student so that he is active in the learning process.

5. Review. Repetition that provides organization and meaning to the material to be learned is known to aid in learning. These lessons provide a summary which is available to the student in his Student Guide for review.

Lessons A-06 to A-08

These provide students with ten hours of self paced instruction on prowords and prosigns. The following learning strategies are used in this group of lessons.

1. Advance organization. The Introduction of each lesson discusses the organization of the Study Skills annex and the place of the individual lesson within the annex. This allows students to understand the interrelationships among the lessons and gives them an overview of the entire learning sequence in the Study Skills annex. Additionally, the Introduction of each lesson contains a statement of the objective and generality in student terms. This allows the student to prepare mentally to learn the appropriate behavior.

2. Motivation. The Introduction of each lesson stresses the importance of learning the prowords/prosigns and their meanings. By relating the lessons to their importance in

the 05C AIT course, the Introduction helps students become more receptive to learning the material.

3. Acquisition. Students will learn the meanings of the prowords and prosigns in small group clusters for lessons A-06 and A-07. For lesson A-08, they will learn equivalent prowords and prosigns in small group clusters. By breaking up the lists of information to be memorized, acquisition will be more manageable.

4. Processing. To allow students the opportunity to process the information, the lessons in this group provide Study Exercises immediately following each small group cluster. These Exercises utilize fill-in, short-answer and multiple-choice formats to reinforce learning.

5. Drill and Practice. A Summary and Practice section in each lesson briefly reviews the objective and generality. Students are then given a Practice Exercise in which they practice the behavior to be tested: matching prowords/prosigns to their meanings for A-06 and A-07 and matching prowords to their equivalent prosigns for A-08.

Lesson A-09 is a six-hour group paced lesson on comparing and contrasting radio and teletype procedures. The following learning strategies are used in this lesson.

1. Advance organization. The Introduction of this lesson discusses the organization of the entire Study Skills annex and the place of this particular lesson in the annex. The Introduction also contains the learning objective and generality. These advance organizers provide the students with overviews of the Study Skills annex and the lesson, allowing the student to develop the proper set going through the lesson.

2. Motivation. The Introduction stresses the need for the students to understand the similarities and differences between the two procedures in their 05C AIT course.

3. Visual processing. Transparencies are used with an overhead projector so the entire class can focus on the points being discussed. By presenting the procedures and sample messages on transparencies, the learning supervisor gains student attention and provides an additional way of storing material for later recall.

4. Active participation. During the Presentation by the learning supervisor, the students are given an opportunity to interact with the instructor. After material is presented, students have the opportunity to ask questions and receive immediate feedback. This enables them to process and store the information as they fit it into their own cognitive structures. After the learning supervisor presents the generality and the radio and radio teletype procedures, students will practice recognizing individual procedures and discriminating between them.

5. Drill and Practice. The Summary and Practice section briefly reviews the objective and generality. Students are then given a Practice Exercise in which they practice the behavior to be tested: answering multiple-choice questions about the differences and similarities between two procedures.

Annex B: Reading Skills
Lessons B-01 to B-11

These lessons deal with finding information in publications, and make use of the printed materials that students will be using in the AIT course. Groups of lessons that are similar or that use similar learning strategies will be considered together.

LESSON NO.	LESSON TITLE	MEDIUM	PREREQUISITE
B-01	Identifying the Organizing System of a Soldier's Manual	Self Paced	
B-02	Using the Organizing System in a Soldier's Manual	Self Paced	
B-03	Identifying the Organizing System of a Technical Manual	Self Paced	
B-04	Using the Organizing System in a Technical Manual	Self Paced	
B-05	Finding Information in a Table of Contents	Self Paced	
B-06	Finding Information in an Index	Self Paced	
B-07	Finding Information in Text	Self Paced	
B-08	Finding Information in an Illustration	Self Paced	
B-09	Finding Information in Tables	Self Paced	
B-10	Finding Information in Diagrams	Self Paced	
B-11	Finding Information in Manuals	Self Paced	

Lessons B-01 through B-04 teach students how to find information in a Soldier's Manual (B-01 and B-02) and a Technical Manual (B-03 and B-04). In these lessons the overall learning strategy has been to divide the procedure into two parts:

1. Understanding the organizing system in each manual (B-01 and B-03).
2. Application of what is learned in each of those lessons to actually use the system in the manual (B-02 and B-04).

In this way the students acquire the information presented in one lesson and practice retrieving it in the next. Both B-02 and B-04 also give the students a three-step procedure for performing the required tasks. This shows the students how to break down the task into smaller steps, one of which directs them to recall previously learned information.

Visual materials such as charts, figures, and arrows are used as learning aids in all four lessons to provide emphasis and to help the student organize the material. Manuals are used by the students to look up information, thus giving the students hands-on practical experience.

Lessons B-05 and B-06. In these lessons the student is taught how to find information in a table of contents (B-05) and an index (B-06). The procedure is explained to the students and they are given the steps necessary to look up information. The term "key concept" is introduced to aid them in finding material that may not be immediately apparent. After this the students are shown how the process works with an example that is worked through in the step-by-step procedure. Then the students practice the procedure and check their answers.

Sample pages from technical publications such as the Soldier's Manual, Technical Manual and CEOI are used to make the material relevant to the radio teletype operator course. Examples used involve radio teletype equipment that will be used in the course.

Graphics such as arrows are used as visual cues to reinforce the printed instruction and to help the student remember the material. At one point in each lesson an important note is given in a box to set it off from the rest of the material.

Organization of the material is provided for the student by relating these lessons to each other. These lessons, like others, are related to other lessons through the annex map.

Lesson B-07 is a self paced three-hour lesson which provides drill and practice on the skills covered in B-01 to B-06. The following learning strategies are used in this lesson.

The Introduction discusses the interrelationship of the lessons in the B-01 to B-07 cluster. Lessons B-01 to B-06 instruct students in locating skills for Technical Manuals (TM) and Soldier Manuals (SM). Lesson B-07 provides the opportunity to practice information locating and literal comprehension. The objective and generality for the lesson are also contained in the Introduction.

The Introduction advises students of the necessity of being able to use their manuals to find technical information. In this lesson, students will use a TM and SM which should further increase interest and motivation.

The Presentation briefly reviews the procedures for using the organizing systems of the TM and SM and the procedures

for finding information using a table of contents and an index. Study Exercises will immediately follow the review of each procedure to reinforce student learning.

After the Presentation, a Practice Exercise will require that students use their manuals to answer questions which test both their ability to find information in the text of technical manuals and then literal comprehension of technical material.

Lessons B-08 to B-10 instruct students in finding information in visual materials. Visual formats included are photographs, drawings, tables, block diagrams, and signal paths. These self paced lessons provide.6 hours of instruction. The following learning strategies are used.

The Presentation of each lesson discusses the place of the individual lesson within the cluster. This discussion combined with the objective and generality allows the students to prepare mentally for the instruction.

Student interest and motivation is stimulated through a discussion of the quantity of graphic formats that is used in technical materials and the importance to training success of being able to interpret and find information in these visuals. A wide variety of examples of the visuals is presented in each lesson to allow students ample practice with each type of graphic display. Students will learn the steps necessary to find information and will then read several examples which illustrate how to use the steps. They will then practice the skill by answering questions about information in photographs, drawings, tables, block diagrams and signal paths.

Lesson B-11 is a self paced three-hour lesson which provides drill and practice of the skills covered in B-01 to B-10. The following learning strategies are used.

The Introduction discusses the entire B-01 to B-11 cluster. Students are made aware that this lesson provides them with an opportunity to integrate the skills covered in lessons B-01 to B-10.

As in B-07, the students are advised of the importance of being able to use their technical manuals to find information. They will use their manuals in class to practice their information locating skills.

The Presentation briefly reviews the procedures for using the organizing systems of the TM and SM, the procedures for finding information using a table of contents and an index and the procedures for finding information in drawings, photographs, tables, block diagrams and signal paths. Study Exercises will immediately follow the review of each procedure to reinforce student learning.

After the Presentation, a Practice Exercise will require that students use their manuals to answer questions which test their ability to find textual and graphic information and their literal comprehension of technical material.

Annex B: Reading Skills
Lessons B-12 to B-16

LESSON NO.	LESSON TITLE	MEDIUM	PREREQUSITE
B-12	Matching Terms with their Definitions	Self Paced	
B-13	Matching Terms with their Definitions	Self Paced	B-12
B-14	Matching Terms with their Definitions	Self Paced	B-12, B-13
B-15	Matching Terms with their Definitions	Self Paced	B-12, B-13, B-14
B-16	Matching Terms with their Definitions	Self Paced	B-12, B-13, B-14, B-15

Each of these lessons contains approximately 20 terms that are used in the radio teletype operator course. The general learning strategy for these lessons is to have the students work with groups of five or six words at a time and then to study and be able to work matching exercises with groups of ten to twenty words. This latter task provides review and discrimination among a larger group of words.

For each group of five or six words, students are given three steps for learning:

1. Read the word and pronounce it.
2. Study the definition and its use in a sentence.
3. Repeat step 1.

Then Study Exercises are given to help the student process these terms. Study Exercises make use of several of the following: matching, completion, true or false, multiple choice, unscramble words, crossword puzzle, filling in missing letters, questions. By using such a variety, the student's attention will be maintained.

When appropriate, graphics are used to illustrate a term. Such terms as angle, one-tenth, and diameter are more easily understood when presented pictorially.

Annex B: Study Skills
Lessons B-17 to B-27

LESSON NO.	LESSON TITLE	MEDIUM	PREREQUSITE
B-17	Integrating Information to Form Concepts: Net, CEOI	GP & OT	
B-18	Integrating Information to Form Concepts: Messages, Radio Sets, Teletypewriter Sets	Self Paced	B-17 .
B-19	Integrating Information to Form Concepts: Antennas, Generators	Self Paced	B-17
B-20	Integrating Information to Form Concepts: Security, ECM/ECCM	Self Paced	B-17
B-21	Integrating Information to Form Concepts: Operator & Maintenance MOS, Manuals	Self Paced	B-17
B-22	Comprehending Reading Passages on Topics Related to Radio Teletype Communication	GP & OT	B-17
B-23	Comprehending Reading Passages on Topics Related to Radio Teletype Communication	Self Paced	B-18, B-22
B-24	Comprehending Reading Passages on Topics Related to Radio Teletype Communication	Self Paced	B-19, B-22
B-25	Comprehending Reading Passages on Topics Related to Radio Teletype Communication	Self Paced	B-20, B-22
B-26	Comprehending Reading Passages on Topics Related to Radio Teletype Communication	Self Paced	B-21, B-22
B-27	Comprehending Reading Passages on Topics Related to Radio Teletype Communication	Self Paced	B-22 thru B-26

Lessons B-17 to B-21 constitute a series of five lessons which teach students to organize terms related to a concept and to show meaningful relationships among the terms so that students can better understand the meanings of the terms. B-17 is a group paced lesson which presents the strategies for organizing the terms; B-18 to B-21 are self paced lessons which provide practice of the strategies with new concepts.

The Presentation of each lesson discusses the place of the individual lesson within the cluster and presents the concepts to be covered. The generality and objective for the lessons are the same; only the concepts change.

Students are informed of the importance of these lessons to success in radio teletypewriter training as the concepts and terms covered are keyed to the 05C AIT course.

Lesson B-17 introduces the strategies for showing the relationship among terms using a general concept and familiar terms. Overhead transparencies introduce each step in the procedure and show information displayed in outlines, diagrams and tables. These transparencies focus student attention on the particular teaching points and visually reinforce the oral presentation.

The learning supervisor then uses the concept "Net" as an example of how the terms of a technical concept can be grouped on charts, outlines and diagrams to show their interrelationship. Again, overhead transparencies are used to illustrate each point.

Following this presentation, students are directed to do, independently, a Study Exercise on the concept "CEOI." Upon the completion of the Exercise, the learning supervisor will

show the completed outlines, charts and diagrams on overhead transparencies. This allows the opportunity to reinforce the correct responses and to provide immediate feedback to student questions. Students then do a Practice Exercise which requires that they match terms to their definitions.

B-16 to B-19 are self paced. Each of these lessons reviews the procedure of organizing terms using the terms related to a key concept and organizes them for the students. The students are then given another set of terms related to a key concept to organize in a Study Exercise. After completing the Study Exercise, students will do a Practice Exercise in which they will match all terms related to each concept with their correct definitions.

Lessons B-22 to B-27 constitute a series of five lessons and a lesson test. These lessons teach students inferential reading comprehension skills. B-22 is a group paced lesson which presents the strategy for answering questions that demands inferential comprehension of technical passages; B-23 to B-26 are self paced lessons which provide practice of the strategies with new passages; B-27 is a lesson test over the entire series.

The Presentation of each lesson discusses the place of the individual lesson within the cluster and discusses the objective and generality that are used for all the lessons within the series.

Student motivation is stimulated as all the passages used in this cluster of lessons relate to the concepts and terms taught in the B-17 cluster. These concepts and terms are keyed to the 05C AIT course. Comprehending the reading passages will further strengthen the students' knowledge of

information necessary for follow-on training and their ability to read technical material.

Lesson B-22 introduces the strategies for comprehending technical passages. Using overhead transparencies, the learning supervisor presents the objective and generality. He then reads a passage for the students and demonstrates the steps for answering questions about the passage. Through guided questioning students learn the rhetorical formats most often used in technical materials: definitions, examples, cause/effect, comparison/contrast, procedures, and classification.

The learning supervisor at all points of the Presentation ensures that students understand the procedure. After the Presentation is over the learning supervisor reviews the objective and steps of the generality using overhead transparencies. Students then turn to another passage in their Student Guides and practice the skill that they learned during the Presentation. There is no Lesson Test after these two hours of instruction. The Lesson Test for the entire cluster is given at B-27.

Lessons B-23 to B-26 are self paced lessons which present the students with several passages and require that the student use the steps in the procedure for answering questions. These passages are accompanied by figures which illustrate some of the more complex concepts.

Following this self paced instruction, B-27 presents the Lesson Test which requires students to answer questions about a passage they have not previously seen. These questions test the students' inferential comprehension.

Annex B: Reading Skills
Lessons B-28 to B-33

LESSON NO.	LESSON TITLE	MEDIUM	PREREQUISITE
B-28	Deciding if Information is Missing in a Message	Self Paced	
B-29	Deciding if Information in a Message is in Error	Self Paced	
B-30	Detecting Problems in Messages	Self Paced	
B-31	Finding Information in Illustration Using Text	Self Paced	
B-32	Identifying Parts of Equipment Using Illustration	GP & OT	
B-33	Performing a Procedure Using Illustration/Text	GP & OT	

Lessons B-28 to B-30 are self paced lessons which teach students to detect problems in messages. The following learning strategies are used in the lessons.

The Introduction of each lesson gives a brief overview of the cluster; it also stresses the direct relationship between each lesson and the 05C AIT course which should serve to stimulate student interest. The objective and generality are also given so that students are prepared for the lesson material.

B-28 presents a three-step procedure for deciding if information in a message is missing. B-29 presents a three-step procedure for deciding if information is in error. B-30 allows the students to integrate the behavior they mastered

in B-28 and B-29. The Presentation of each lesson shows several examples of messages that are incorrect. The student reads each example and sees how the steps of the generality are used to determine where in the sample message the information is missing or incorrect.

After the Presentation, the student does a Practice Exercise which contains sample messages. The student must then apply the steps of the generality to decide if information is missing or incorrect.

B-31 to B-33 is a cluster of lessons which teach students how to use text, illustration, and equipment in conjunction with one another. The following learning strategies are used.

The Introduction of each lesson describes the interrelationship among the lessons in this cluster. It also stresses the importance to the 05C AIT course of mastering these skills. Two of the three lessons require hands-on performance which will elicit student interest and motivation.

B-31 is self paced and requires that students use the text accompanying an illustration and the illustration to answer questions. To answer the questions, students have to integrate the graphic and textual information. The presentation guides students through several examples, showing them how to apply the generality to the different examples. Students then practice this behavior independently.

In B-32, a group paced lesson, students identify pieces of equipment using a labeled illustration. This lesson requires that a learning supervisor be present to model the behavior and assess if a student has been able to use the illustration to find and identify the real piece of equipment. The learning supervisor demonstrates how to use the

generality to master the behavior. Students refer to illustrations in their Student Guides while the learning supervisor uses the real equipment and takes them through the steps of the generality. During the Practice Exercise, each student has the opportunity to match the illustration to the real equipment.

In B-33 students learn to peform a written procedure using actual equipment. The written procedure may be accompanied by an illustration. This lesson is also group paced so that a learning supervisor can demonstrate how to use written and graphically presented material to perform a procedure. After the learning supervisor models the steps of the generality, students practice the behavior independently.

Annex C: Language Skills

LESSON NO.	LESSON TITLE	MEDIUM	PREREQUISITE
C-01	Tracing Letters and Numbers in a Lettering Chart	GP & OT	
C-02	Pronouncing Letters and Numbers in a Phonetic Alphabet Chart	GP & Chart	
C-03	Arranging Single Letters in Alphabetical Order	Self Paced	
C-04	Arranging Letter-Number-Letter Groups in Alphanumeric Order	Self Paced	
C-05	Spelling Commonly Used Military Words	Self Paced & A/T*	
C-06	Spelling Commonly Used Military Words	Self Paced & A/T	C-05
C-07	Spelling Commonly Used Military Words	Self Paced & A/T	C-05, C-06
C-08	Printing Text of a Message Presented Orally	Self Paced & A/T	
C-09	Filling Out Forms	GP & OT	
C-10	Reading Aloud Text of Printed Message	GP & OT	

* A/T - Audio Tape

Lessons C-01 and C-02. Both of these lessons are group paced, led by an instructor, and involve writing and pronouncing letters and numbers according to military format. The purpose of these lessons is to teach the students the symbols used to direct students to write and pronounce in the required way.

After giving the students the reason for these lessons, the learning supervisor gives a demonstration of what is required. This includes an explanation of the lines, arrows, numbers (C-01), hyphens, and underlines (C-02). Students learn by imitation; they are asked to repeat after the instructor.

Active participation is used in these lessons in two ways. First, students answer questions asked by the instructor. Second, students actively perform by tracing letters (C-01) and by reciting the letters of the alphabet with their key words (C-02).

In C-02 a large chart measuring approximately three by four feet is used as a learning aid. Transparencies are used for demonstrating tracing of letters in C-01.

Lessons C-03 and C-04. In these lessons students are taught to arrange single letters (C-03) or letter-number-letter groups (C-04) in alphabetic or alphanumeric order.

First, to ensure that the order of the letters of the alphabet is known, students are given the alphabet and four study exercises to work with this order (C-03). This involves:

1. circling letters in order when they are interspersed in a nonsense sentence,

2. writing the alphabet in groups of letters, filling in missing letters in the alphabet, and
3. finding the missing center letter in a group of three letters.

The variety of these exercises was designed to maintain the student's attention while going through the lesson.

Arranging single letters in alphabetic order is taught by breaking down the task into three basic steps. The students are told to:

1. Say the alphabet.
2. When you come to a letter on the list you have been given, write it down.
3. Check your arrangement by repeating step 1.

After these steps are worked through with examples, a summary is given and the students are provided an opportunity to practice the procedure.

Lesson C-04 uses a similar learning strategy of outlining steps to follow, but here it is alphanumeric order that is involved. Now the procedure entails a slightly more complex operation. After letters are ordered, then numbers must be arranged and, if necessary, the final letters are treated. Once the steps are given, examples show how they work and students are provided an opportunity to practice.

C-05 through C-07. Since some students have problems spelling commonly used military terms, these lessons were written to provide some experience in this area. Cues and hints are used to help the students generalize to other words.

Each lesson teaches the student to spell thirty words. Four steps are given:

1. Study the spelling and syllabication. (Cues and hints are given.)
2. Pronounce the word. (This helps the student process the word.)
3. Write the word. (It will be easier to remember.)
4. Check the spelling. (Reinforcement occurs.)

An audiotape is then used to give the correct pronunciation of the words and to have the student practice the correct pronunciation by immediately imitating what he hears. The second part of the tape has the student listen to the correct pronunciation of a word, write the word, listen to the correct spelling on the tape and correct his own paper.

C-08 is a self paced lesson that uses an audiotape that is designed to teach students how to write the text of messages presented orally. The following learning strategies are used.

The Introduction advises students of the place of this lesson within the Language annex. In C-05 through C-07, they learned to spell words commonly used in messages. In C-08, students are given a procedure to follow to write entire messages which they hear on an audiotape. The Introduction stresses the importance of the lesson to the AIT course and gives the objective and generality for the lesson.

During the Presentation, the students read a section on punctuation used in messages and are given several examples of what a written message looks like. They then turn on the tape recorder and are directed to copy the message that they hear. Each message is repeated a second time, allowing the

student to make corrections of his copy. The tape contains several such messages for the student to practice.

C-09 is a group paced lesson that teaches students how to complete four different forms, given the appropriate information. The following learning strategies are used.

The learning supervisor initially discusses the place of the lesson within the Language annex, the lesson objective and it's four-step generality. The student is introduced to the four forms and made aware of their relevance to the 05C AIT course.

The learning supervisor uses overhead transparencies to focus student attention and demonstrate how to fill in the appropriate information using the steps of the generality. After demonstrating how to fill in a particular form, the supervisor directs the students to complete a Study Exercise which requires that they use the actual form. Students are thus provided with immediate feedback and reinforcement. When the learning supervisor has presented all four forms and the students have practiced completing each one, the students are given a Practice Exercise which requires that they fill in five pieces of information onto each of the four forms.

C-10 is a group paced lesson which instructs students in reading aloud the text of a printed message. The learning strategies are listed below.

During the Introduction, the learning supervisor tells the students that this is the last lesson in the Language annex. Additionally, students are told the objective and generality; the importance of this lesson to the radio teletype operator course is mentioned.

The learning supervisor models the behavior for the class showing sample messages on overhead transparencies and reading them aloud correctly. He points out the most commonly made errors as he reads. When the supervisor has demonstrated reading an adequate number of messages, students take turns reading sample messages aloud. The learning supervisor critiques each student's reading. Student reading is critiqued for reader pronunciation, volume, and rate of delivery. After each student has had ample opportunity to practice the behavior, the learning supervisor evaluates each student separately.

Annex D: Math Skills

LESSON NO.	LESSON TITLE	MEDIUM	PREREQUISITE
D-01	Changing Civilian Time to Military Time	Self Paced	
D-02	Adding Hours to Military Time	Self Paced	
D-03	Subtracting Hours from Military Time	Self Paced	
D-04	Adding or Subtracting Hours Moving Across Days	Self Paced	
D-05	Adding Two Numbers which Contain Decimals	Self Paced	
D-06	Subtracting Two Numbers Which Contain Decimals	Self Paced	
D-07	Finding 10% of a Number	Self Paced	
D-08	Finding Numbers which are 10% Above & 10% Below a Given Number	Self Paced	
D-09	Multiplying a 5-digit Number by a 1-digit Number	Self Paced	
D-10	Subtracting 5- or 6-digit Numbers	Self Paced	
D-11	Dividing 7-digit Numbers by 6-digit Numbers	Self Paced	
D-12	Rounding-off a Number Containing Two Decimal Places to the Nearest 10th	Self Paced	
D-13	Dividing 468 by a Number Containing a Decimal	Self Paced	
D-14	Dividing 468 by a Number Containing a Decimal and Rounding-off the Answer to the Nearest 10th	Self Paced	

Lessons D-01 to D-14

This group of lessons will be discussed together because there are few variations in the learning strategies employed from one lesson to another. There are three branches or groups of mathematical procedures in this annex: (1) converting to military time format, (2) finding ten percent of a number, and (3) dividing, with the component steps of multiplying and subtracting.

First, students are motivated to learn this material because it is explained that what is being taught has relevance to the radio teletype operator course. The particular connection, such as determining the length of antennas, is also given.

Each math procedure is taught in a step-by-step approach. The overall explanation is given verbally and then the words are translated into mathematical format. In a sense, this provides two alternate ways of processing the material, and one approach reinforces the other. If a term is introduced that might not be known, such as digit or decimal point, it is defined at the point it is needed in the explanation. Since it is then used in context, it is more easily understood when introduced at this stage. All the different cases of a problem are given and if a shortcut is used an explanation of why it works is presented.

Extensive use is made of visual materials in these lessons. In some lessons, a column of verbal explanation is given on the left side of the page with the corresponding mathematical equivalent in the right column. In other lessons, the mathematical explanation follows the verbal presentation. Arrows, brackets, circles, boxes, and underlines are used extensively to highlight key points.

Wherever possible theoretical explanations were made concrete. This was done by giving everyday applications of the material. Examples such as digital clocks and time zones within the United States were used.

Although these lessons are self paced with a learning supervisor available for questions, there is a provision for interaction with the lesson writer. Questions are asked of the student to help him go back and check his work. Hints and cues are also given.

VI. COURSE UPDATING PROCESS

Since the FBSEP course was developed to support the 05C AIT course, changes that occur in the AIT course may necessitate changes in the FBSEP course. Procedures for making these changes are outlined in this section of the Course Management Plan. Two types of changes in the 05C AIT course might be expected to occur: (1) changes in course content, or (2) changes in course scheduling.

Changes in 05C Course Content

If there is a change in the 05C AIT course, FBSEP materials should be examined to see if any changes should be made in these materials. If warranted, changes should be made in the FBSEP materials to insure that students acquire the knowledge and skills which are prerequisite to the technical materials and to ensure that time is not wasted teaching basic knowledge and skills that are no longer functional.

Guide For Revising FBSEP Materials

This Guide is provided in Table 9 to assist the analyst in deciding if revisions in FBSEP materials are required. The left hand column lists lessons in the FBSEP that should be examined to see if changes are required to accomodate changes in the 05C AIT course. The word "change" as used in the Guide For Revising FBSEP Materials includes an addition, deletion, or modification of existing materials. The word "examine" as used in this Guide includes reading the FBSEP lesson's objective, generality, presentation, exercises and tests.

TABLE 9

GUIDE FOR REVISING FBSEP MATERIALS

05C AIT Course	FBSEP Materials
If the change is in -	Examine -
study materials given to students	lessons A-02, A-05
training aids and devices used by students	lessons A-03, A-05
sequence in which students progress through the course	lessons A-04, A-05
number or name of annex	lesson A-04, A-05
prowords	lessons A-06, A-08, A-09
prosigns	lessons A-07, A-08, A-09
radio message format/procedure	lesson A-09
teletypewriter message format/ procedure	lesson A-09
words or terms used	Master List of Words and Terms (Appendix G)
call signs	lessons C-03, C-04
communications nets	lessons B-17, B-22
CEOI	lessons B-17, B-22
radio equipment	lessons B-18, B-23, B-31 through B-33
teletypewriter equipment	lessons B18, B-23, B-31
messages	lessons B-18, B-23, B-28 through B-30, C-08, C-10
antennas	lessons B-19, B-24
generators	lessons B-19, B-24

Continued on next page

TABLE 9 (cont'd.)

05C AIT Course	FBSEP Materials
security	lessons B-20, B-25
ECM and/or ECCM	lessons B-20, B-25, B-27
operator MOSs	lessons B-21, B-26
maintenance MOS	lessons B-21, B-26
publications (FMs, TMs, etc.)	lessons B-01 through B-11, B-21, B-26
DA Form 4004	lessons A-09, C-09
DA Form 4158	lessons C-09
DA Form 2404	lessons C-09
printing of letters/numbers	lessons C-01, A-09
pronunciation of letters/numbers	lessons C-02, A-09
math requirements involving time	lessons D-01 through D-04
math requirements related to setting frequency on Duplex RT	lessons D-05 through D-08
math requirements related to finding antenna length	lessons D-09 through D-14

Master List of Words and Terms

A major component of the FBSEP is training on words and terms which facilitate learning 05C AIT materials. These words and terms are arranged in alphabetical order in the Master List of Words and Terms provided in Appendix G. This list also cites the FBSEP lesson which contains each individual word and term on the list.

Example #1: Using The Guide For Revising FBSEP Materials (Table 9)

Assume that there is a change (addition, deletion, or modification) in the format of the lesson study guides used in the 05C AIT course. Since the lesson study guides are study materials given to students, the analyst should examine FBSEP lessons A-02 and A-05 to see if any changes should be made in these lessons.

Example #2: Using the Master List of Words and Terms (Appendix G)

Assume that there is a change (addition, deletion, or modification) of a term used in the 05C AIT course. The analyst would look for the term in the Master List of Words and Terms and note in which FBSEP lessons, if any, the term was found. The analyst would then decide if a change should be made in the FBSEP lesson.

Types of Changes That May Be Required in FBSEP Lessons

The following types of changes may be required for FBSEP materials.

1. The addition of material not currently found in FBSEP lessons.
2. The modification of material currently found in FBSEP lessons.
3. The deletion of material currently found in FBSEP lessons.

When making changes in FBSEP lessons, care must be taken to ensure that changes are made at every point in the lesson so that consistency is maintained. Key points in FBSEP lessons include the objective, generality, presentation and examples,

practice exercise and explanations, study exercise (if any), lesson test and scoring key, remediation exercise and explanations, and remediation test and scoring key. Remember FBSEP lessons include Student Guides and Learning Supervisor Guides and any changes would need to be made to both of these documents.

Procedure For Updating FBSEP

Below is a description of the procedure to follow to make changes in FBSEP materials.

1. Something added to 05C AIT materials:
   a. Examine the new 05C AIT material to see what basic knowledge and skills might be prerequisite for the material that has been added. (Follow procedure described in the Interim Analysis Report.)
   b. Examine the current FBSEP lessons to see if the basic knowledge and skills identified in Step a are already present. Read the titles of current FBSEP lessons, the Guide for Revising FBSEP Materials, (Table 9), and the Master List of Words and Terms (Appendix G). Read the FBSEP lessons's objective, generality, and tests to verify your initial finding.

      (1) If the basic knowledge or skill is already included in FBSEP lessons, the task is completed.
      (2) If the basic knowledge or skill is not present in FBSEP lessons, modify an existing FBSEP lesson or prepare a new FBSEP lesson to teach the basic knowledge or skill identified in step a. Also make an entry on the table titled Prerequisite Basic Skills for 05C10 AIT Lessons (Appendix C) to show the addition of the new prerequisites.

2. Something deleted from 05C AIT materials:
   a. Examine the deleted 05C AIT material to see what basic knowledge or skills might have been prerequisite to the material that has been deleted. Also examine the table titled Prerequisite Basic Skills for 05C10 AIT Lessons (Appendix C) which lists the FBSEP lessons which support each 05C AIT lesson.
   b. Examine the current FBSEP lesson to verify that the knowledge and skills identified in Step a are in the lesson. Read the FBSEP lesson objective, generality, and test as a final check.

      (1) If the FBSEP lesson supports only one 05C AIT lesson and deals with one and only one basic skill, delete the lesson and delete its entry on the Prerequisite Basic Skills for 05C10 AIT Lesson table (Appendix C).
      (2) If the FBSEP lesson supports more than one 05C AIT lesson, do not delete the FBSEP lesson but delete the entry on the Table of Prerequisite Basic Skills (Appendix C) for the prerequisite relationship which is no longer required.

Notification of Changes of Course Content

When there is a requirement to change training material in the AIT course, the following action will occur:

1. Directorate of Training and Doctrine (DTD) will be responsible for notifying the Chief of Education Division of the Army Community Service of impending changes, an estimate of the subject matter type, amount of time involved and any other available details.
2. DTD will provide a copy of first draft material, Program of Instruction, lesson plans, etc. to the BSEP coordinator.

3. When new training material is issued to the AIT course, a copy of each lesson will be provided to the BSEP coordinator. An analysis of the training material will be performed as outlined in the previous portion of the Course Updating Process section.

When subsequent changes are recommended for FBSEP materials, a FBSEP Revisions sheet (Appendix D) must be completed and forwarded to the BSEP coordinator. Any changes to FBSEP must have prior approval of the BSEP coordinator.

Changes in 05C Course Scheduling

In the event of a change in the sequence of the 05C course lessons (schedule revision), the BSEP Branch will study the change to determine its impact on the FBSEP course. Should the change be significant enough to affect the strategy of FBSEP application, i.e. the mix of front-load vs. pre-annex lesson placement, a new table of FBSEP and AIT lessons will be required. Table 7 of the Sequencing of Instruction section of this Course Management Plan should be revised.

When students are scheduled for training in an annex out of normal sequence due to course load or for any reason, the supervisor implementing the deviation will effect the necessary coordination with the BSEP coordinator to prevent non-attendance in FBSEP.

When there is to be a change to the schedule of training (change in sequency of lessons) the AIT course chief will notify the BSEP coordinator of the changes. An assessment of the impact on the FBSEP will be made and if it is of any great consequence, the AIT course chief will be contacted and arrangements made to negate any serious affect on the FBSEP.

VII. RECYCLE CRITERION AND PROCEDURES

As described in the section on Sequencing of Instruction of the Course Management Plan, students will be assigned to FBSEP lessons either before the start of the 05C course or at one or more of three points during that course. This section explains the procedures that will be applied to students who are experiencing additional problems while progressing through the 05C course.

The procedures for handling these problems are based in part on some preliminary data collected in April-May 1981 during an early phase of analysis of problems in the 05C course. Table 10 gives a breakdown of the percent of failures on lesson and annex tests, where the percent of failure is greater than ten.

TABLE 10
PERCENT OF FAILURE ON AIT LESSON OR ANNEX TESTS
(10%, N = 101)

TEST	PERCENT	TEST	PERCENT
H01	12	K01	16
H02	18	K02	18
H03	39	K03	18
H07	53	M01	11
J02	31	N01	17
J04	29	N02	30
I01	11	N03	28
		N05	17
		N06	34

If a student is having trouble during the course either because his Progression Index (P.I.) is too high or he is not able to pass a lesson or annex test, a check should be made to ensure that he has completed the FBSEP lessons to which he was assigned on the basis of his Diagnostic Test. This can be done by checking his FBSEP Lesson Prescription to see what lessons were assigned and then checking his Student Progress Report (maintained by the FBSEP Coordinator) to see if the assigned lessons were actually completed. If a student has not taken the assigned FBSEP lessons, and he has passed the point at which they are administered, he should be given them before he continues in the 05C course. If a student has not had the Diagnostic Test, this should be administered to him immediately and the appropriate FBSEP instruction assigned on the basis of the test results and the Diagnostic Test Model. Special attention should be paid to the lessons in Table 10 since so many students have failed them in the past.

Because most students fail out of the course during H or J annex particular attention should be paid to students having trouble here. If a student has taken the assigned FBSEP lessons, his problem areas should be determined during counseling; he can then be assigned to one or more of the FBSEP lessons usually assigned only to the bottom scoring eight percent of students on the Diagnostic Test. Of course, if he has had these lessons they should not be repeated. The following analysis of problem areas and lessons should be used for assignment to additional FBSEP lessons.

PROBLEM LESSONS OR ANNEXES	PROBLEM AREA	FBSEP LESSON
H01 to H03	prowords	A06
J01	prosigns	A07
J Annex	prowords and prosigns	A06 to A08
J02 to J04	radio & teletype procedures	A09
H or J Annex	understanding concepts	B17 to B21

VIII. STUDENT CONTROL PROCEDURES

While the student control procedures were described in conjunction with the Course Administration section of this Course Management Plan, this section will outline the procedures required to document and control student progression from the diagnostic test phase through the 05C10 Functional BSEP to release of the students back into the 05C10 AIT Course. The following sequence will be used.

1. FBSEP personnel will administer the Diagnostic Test and Student Questionnaire to incoming students. ASVAB scores will be collected and students will be assigned to the appropriate FBSEP lessons on the basis of the Diagnostic Test Model.

2. Two forms will be completed for the purpose of assigning students to FBSEP lessons. These are explained below.

A. FBSEP Lesson Prescription. This is a list of FBSEP lessons to which the student is assigned; one is prepared for each student requiring any FBSEP lessons. All the FBSEP lessons are listed on the form and those to which the student is assigned are circled. Instructors will put a line through each lesson as it is completed by the student. (See Appendix F.)

This form will be given to:

(1) FBSEP instructors who will be assigned to teach these students. These include front-loaded as well as pre-annex sections.
(2) Records section of the 05C course.

B. FBSEP Enrollment Roster. A list of the students assigned to FBSEP will be prepared by the BSEP scheduling section. This list will be prepared for each instructor and will give the students' names, social security numbers, the FBSEP section to which they are assigned and the time and place of the Functional BSEP training. (See Appendix A.)

This form will be prepared by the FBSEP coordinator and given to:

(1) FBSEP instructors who teach either the front-loaded or the pre-annex sections.
(2) AIT instructors for H07, J04, and M01. These instructors will need the list of FBSEP student so that they can assign them to the appropriate FBSEP lessons after they complete one of these AIT lessons.
(3) Records section of the 05C course.

3. Student control procedures for moving from one classroom to another currently in effect in the AIT course will be used for students participating in FBSEP. Test Control Slip, FG Form 6443 (Appendix E) will be used to control student movement from one class, building or area to another. For example, when a student is assigned to FBSEP instruction that takes place after H07, the AIT instructor for H07 will give him a Test Control Slip when he completes H07. The FBSEP instructor will collect his Test Control Slip and issue him a new one back to the AIT course (J01) when the student has completed this segment of FBSEP. Refer to Figure 1 for the integrating of FBSEP and the 05C AIT course; Table 7 also gives the sequencing of FBSEP and 05C AIT lessons.

IX. STUDENT ACHIEVEMENT RECORDS AND MANAGEMENT PROCEDURES

DA 669

At the time the student takes the Diagnostic Test he will be asked to fill out the demographic portion of form DA 669, Educational Development Record. The FBSEP instructor will forward it to the Army Education Center records section where it will be maintained. Each couseling session will be documented by a statement on this form.

FBSEP Student Progress Report

Students' achievement in the FBSEP lessons will be documented in the FBSEP Student Progress Report (Appendix B). At least one form will be completed by each instructor for each student participating in the FBSEP course and if additional space is needed, a second or a third sheet can be used. This form documents the student's (1) FBSEP lessons taken, (2) test results, (3) instructor comments and (4) counseling record, including date and reason for referral. When the student has completed the lessons assigned to him in a particular FBSEP segment (front-loaded or pre-annex), the instructor will complete the Student Progress Report and forward it to the FBSEP coordinator and the course records section of the 05C AIT course.

Absentee Report

As absentee report will be made to the student's unit by telephone prior to 0800 hours each day. On the morning beginning the fourth consecutive day of absence the roster will identify the student for category X status.

If a student arrives in class with an inappropriate Control Slip, the instructor will refer the student to the BSEP coordinator. For example, the instructor will do this if the student reports to the FBSEP class several hours after he leaves his previous learning area.

APPENDIX A

FBSEP ENROLLMENT ROSTER

FBSEP ENROLLMENT ROSTER

Instructor_____ Place_____

Starting Date_____ Time_____

NAME	SSN	FBSEP SECTIONS*

*List 1, 2, 3, or 4: 1. Front-loaded 2. After H07
3. After J04 4. After M01

APPENDIX B

FESEP STUDENT PROGRESS REPORT

FBSEP STUDENT PROGRESS REPORT

Student's Name_____ Instructor's Name_____

SSN_____ Starting Date_____

LESSON NUMBER	TEST RESULTS	INSTRUCTOR COMMENTS

COUNSELING RECORD

Date	Reason

APPENDIX C

TABLE OF PREREQUISITE BASIC SKILLS FOR AIT LESSONS

PREREQUISITE PBSEP LESSONS FOR

05C10 AIT LESSONS

ANNEX A: STUDY SKILLS	AIT LESSON																												Other
	H						J			I	K		N			M	N			L					M				
	1	2	3	4	5	6	1	2	3	1	1	2	1	2	3	1	4	5	6	1	2	3	2	3					
A-01 Understanding PBSEP																													X
A-02 Identifying parts, functions, sequence in lesson study guide																													X
A-03 Identifying training aids & devices used in course																													X
A-04 Identifying parts, functions, sequence across lessons																													X
A-05 Understanding the instructional system																													X
A-06 Memorizing meanings of prowords	X	X	X																										
A-07 Memorizing meanings of prosigns							X	X	X																				
A-08 Identifying relationships between prowords & prosigns							X	X	X																				
A-09 Comparing/contrasting radio & teletype procedures							X	X	X																				

TABLE CONTINUED

PREREQUISITE FBSEP LESSONS FOR

05C10 AIT LESSONS

ANNEX B: READING SKILLS	AIT LESSON																												Other
	H						J			I	K		N			M	N			L			M						
	1	2	3	4	5	6	1	2	3	1	1	2	1	2	3	1	4	5	6	1	2	3	2	3					
B-01 Identifying the organizing system of a soldier's manual																													X
B-02 Using organizing system in a soldier's manual																													X
B-03 Identifying the organizing system of a technical manual																													X
B-04 Using numbering system in a technical manual										X						X													
B-05 Finding information in a table of contents		X					X																						
B-06 Finding information in an index										X																			
B-07 Finding information in text										X	X	X							X						X				
B-08 Finding information in an illustration	X				X			X		X	X		X	X	X		X	X						X	X				
B-09 Finding information in tables	X						X	X	X		X	X	X		X	X			X						X				
B-10 Finding information in diagrams																	X								X				
B-11 Finding information in manuals										X																			
B-12 through B-16 Matching terms and their definitions																													X
TABLE CONTINUED																													

PREREQUISITE FBSEP LESSONS FOR

05C10 AIT LESSONS

ANNEX B: READING SKILLS (Cont.)	AIT LESSON																													Other
	H						J			I	K		N			M	N			L			M							
	1	2	3	4	5	6	1	2	3	1	1	2	1	2	3	1	4	5	6	1	2	3	2	3						
B-17 through B-21 Integrating information to form concepts																														X
B-22 through B-27 Comprehending reading passages																														X
B-28 Deciding if information is missing in a message			X						X																					
B-29 Deciding if information in a message is in error			X						X																					
B-30 Detecting problems in messages			X						X																					
B-31 Finding information in illustration using text	X				X			X		X	X		X	X	X		X	X						X	X					
B-32 Identifying parts of equipment using illustration	X				X			X		X	X		X	X	X		X	X						X	X					
B-33 Performing a procedure using illustration/text	X				X			X		X	X		X	X	X		X	X			X	X		X	X					
TABLE CONTINUED																														

PREREQUISITE FBSEP LESSONS FOR

05C10 AIT LESSONS

ANNEX C: LANGUAGE SKILLS	AIT LESSON																													Other
	F	H						J			I	K		N			M	N			L				M				
	2	1	2	3	4	5	6	1	2	3	1	1	2	1	2	3	1	4	5	6	1	2	3	2	3					
C-01 Tracing letters and numbers in a chart	X		X		X		X						X							X									
C-02 Pronouncing letters and numbers in phonetic alphabet chart	X		X																										
C-03 Arranging single letters in alphabetic order		X						X																					
C-04 Arranging letter-number-letter groups in alphanumeric order		X						X																					
C-05 through C-07 Spelling commonly used military words			X		X		X						X							X									
C-08 Printing text of message presented orally			X																										
C-09 Filling out forms			X		X								X							X									
C-10 Reading aloud text of printed message			X																										

TABLE CONTINUED

PREREQUISITE FBSEP LESSONS FOR

05C10 AIT LESSONS

ANNEX D: MATH SKILLS		AIT LESSON																													
		H						J			I	K		N			M	N				L				M		Other
		1	2	3	4	5	6	1	2	3	1	1	2	1	2	3	1	4	5	6	1	2	3	2	3		
D-01	Changing civilian time to military time		X																												
D-02	Adding hours to military time		X																												
D-03	Subtracting hours from military time		X																												
D-04	Adding or subtracting hours moving across days		X																												
D-05	Adding two numbers which contain decimals																							X							
D-06	Subtracting two numbers which contain decimals																							X							
D-07	Finding 10% of a number																							X							
D-08	Finding numbers which are 10% above & below a given number																							X							
D-09	Multiplying a 5-digit number by a 1-digit number														X																
D-10	Subtracting 5- or 6-digit numbers														X																
D-11	Dividing 7-digit numbers by 6-digit numbers														X																
D-12	Rounding off a number containing two decimal places to the nearest 10th														X																

TABLE CONTINUED

PREREQUISITE FBSEP LESSONS FOR

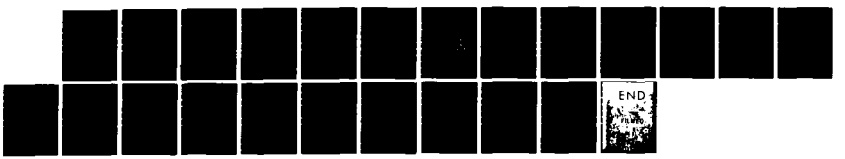
05C10 AIT LESSONS

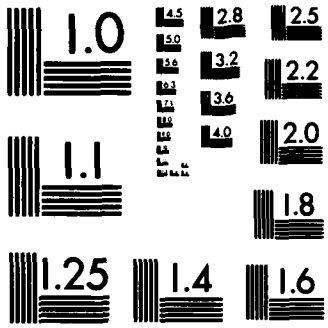
ANNEX D: MATH SKILLS (Cont.)	AIT LESSON																											
	H						J			I	K		N			M	N				L				M		Other
	1	2	3	4	5	6	1	2	3	1	1	2	1	2	3	1	4	5	6	1	2	3	2	3			
D-13 Dividing 468 by a number containing a decimal														X													
D-14 Dividing 468 by a number containing a decimal and rounding off the answer to the nearest 10th														X													

APPENDIX D

FBSEP REVISIONS

AD-A130 234 FBSEP (FUNCTIONAL BASIC SKILLS EDUCATION PROGRAM) 2/2
COURSE MANAGEMENT PLAN 05C10(U) PERSPECTIVE
INSTRUCTIONAL COMMUNICATIONS INC SAN DIEGO CA
UNCLASSIFIED 30 JUL 83 DABT60-81-C-0027 F/G 5/1 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

FBSEP REVISIONS

Analyst_____ **Date**_____

Additions to 05C AIT Materials:

Prerequisite Basic Skills:

Recommendations Re. Modification or Addition of FBSEP Lessons:

Deletions from 05C AIT Materials:

Prerequisite Basic Skills:

Recommendations Re. Modification or Deletion of FBSEP Lessons:

APPENDIX D

FBSEP REVISIONS

APPENDIX E

TEST CONTROL SLIP

TEST CONTROL SLIP

(Proponent: 1st Sig Trng Bde)

NAME: _____ MOS: _____ UNIT: _____

1. FR AREA: _____ DTG: _____ TEST REQUIRED: _____

LEARNING SUPV SGNR: _____

2. TEST RESULTS: PASS FAIL TIME RELEASED: _____ TEST ADMINISTRATOR SGNR: _____

3. CLEARED FR LEARNING AREA BY: _____ TIME CLEARED: _____

4. CLEARED FR SEC BY: _____ TIME: _____ ASGD TO SEC: _____

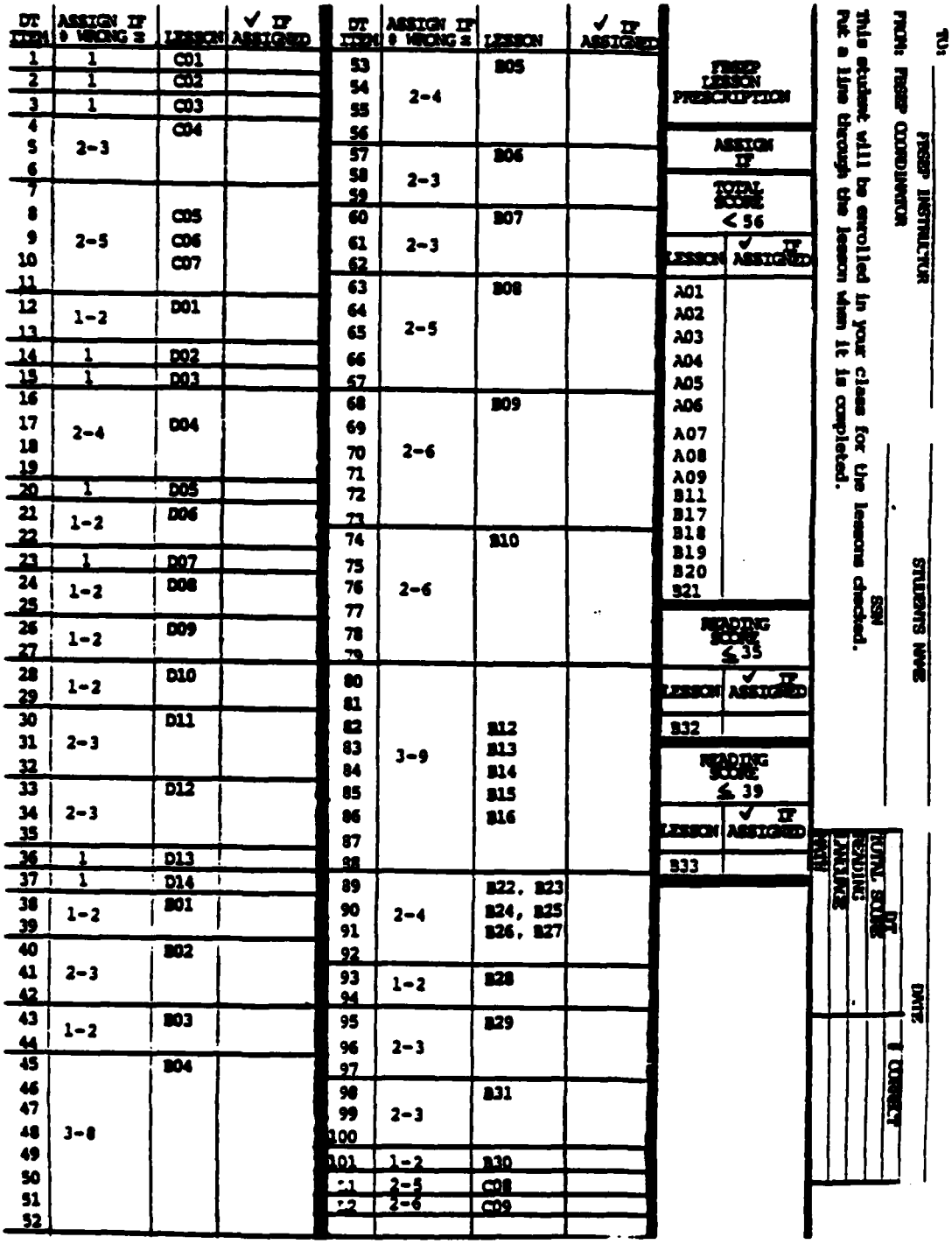
5. STUDENT ARRIVED AT SEC: _____ TIME: _____ SEC SUPV SGNR: _____

6. STUDENT ARRIVED AT AREA: _____ TIME: _____ LEARNING SUPV SGNR: _____

ATSH Form 143 (Replaces FCSIOS Form 145)

APPENDIX F

FBSEP LESSON PRESCRIPTION



DT ITEM	ASSIGN IF # WRONG ≥	LESSON	✓ IF ASSIGNED
1	1	C01	
2	1	C02	
3	1	C03	
4	2-3	C04	
5			
6			
7	2-5	C05	
8		C06	
9		C07	
10			
11			
12	1-2	D01	
13			
14	1	D02	
15	1	D03	
16	2-4	D04	
17			
18			
19			
20	1	D05	
21	1-2	D06	
22			
23	1	D07	
24	1-2	D08	
25			
26	1-2	D09	
27			
28	1-2	D10	
29			
30	2-3	D11	
31			
32			
33	2-3	D12	
34			
35			
36	1	D13	
37	1	D14	
38	1-2	B01	
39			
40	2-3	B02	
41			
42			
43	1-2	B03	
44			
45	3-8	B04	
46			
47			
48			
49			
50			
51			
52			

DT ITEM	ASSIGN IF # WRONG ≥	LESSON	✓ IF ASSIGNED
53	2-4	B05	
54			
55			
56			
57	2-3	B06	
58			
59			
60	2-3	B07	
61			
62			
63	2-5	B08	
64			
65			
66			
67			
68	2-6	B09	
69			
70			
71			
72			
73			
74	2-6	B10	
75			
76			
77			
78			
79			
80	3-9	B12 B13 B14 B15 B16	
81			
82			
83			
84			
85			
86			
87			
88			
89	2-4	B22, B23 B24, B25 B26, B27	
90			
91			
92			
93	1-2	B28	
94			
95	2-3	B29	
96			
97			
98	2-3	B31	
99			
100			
101	1-2	B30	
102	2-5	C08	
103	2-6	C09	

TREEP LESSON PRESCRIPTION

ASSIGN IF

TOTAL SCORE < 56

LESSON	✓ IF ASSIGNED
A01	
A02	
A03	
A04	
A05	
A06	
A07	
A08	
A09	
B11	
B17	
B18	
B19	
B20	
B21	

READING SCORE ≤ 35

LESSON	✓ IF ASSIGNED
B32	

READING SCORE ≤ 39

LESSON	✓ IF ASSIGNED
B33	

To: _____

FROM: TREEP COORDINATOR _____ TREEP INSTRUCTOR _____

This student will be enrolled in your class for the lessons checked. Put a line through the lesson when it is completed.

STUDENT'S NAME _____ SSN _____

	TOTAL SCORE	DT
READING		
LANGUAGE		
MATH		

DATE _____ # CORRECT _____

NOTE: This is a reduced copy of the actual form. Use the full sized form as it appears in the Diagnostic Test Model.

INSTRUCTIONS FOR COMPLETING

FBSEP LESSON PRESCRIPTION

1. The FBSEP Lesson Prescription is filled out by the FBSEP proctors after the student has completed the Diagnostic Test and the test has been scored.

2. An FBSEP Lesson Prescription is filled-out for each student who takes the Diagnostic Test.

3. In order to fill-out the FBSEP Lesson Prescription, the proctor will need the student's Answer Sheet and Answer Booklet.

4. Make the following entries on the heading of the FBSEP Lesson Prescription.

   a. The first and last name of the student.
   b. The student's social security number.
   c. The date that the Diagnostic Test was administered to the student.
   d. The name of the instructor who is to receive the Prescription will be filled in by the FBSEP coordinator.

5. Fill in the left and center columns of the FBSEP Lesson Prescription as follows:

   Note: Both the left and center column have four subcolumns. The left cluster of four columns covers Diagnostic Test items 1 through 52. The center cluster of four columns covers Diagnostic Test items #53 through #101 and L1 and L2.

   a. The four subcolumns are labeled as follows:

      (1) DT ITEM - Diagnostic Test item number.
      (2) ASSIGN IF # WRONG - the number of items on the Diagnostic Test that the student must get wrong in order to be assigned to a FBSEP lesson.
      (3) LESSON - the FBSEP Lesson to which the student should be assigned.
      (4) IF ASSIGNED - the fact that the student met the criterion and is assigned to the indicated FBSEP Lesson.

b. The Diagnostic Test Items and corresponding FBSEP Lessons have been arranged into clusters.

Example: DT Item #1 and Lesson C01 are a cluster.
DT Item #4, #5 and #6 and Lesson C04 are a cluster.
DT Items #80 through #88 and Lessons #B12 through #B16 are a cluster.

c. Fill out the left column as follows:

(1) Lay the FBSEP Lesson Prescription on top of the multiple-choice Answer Sheet so that the DT ITEM numbers of the Prescription are parallel to the numbers on the Answer Sheet.
(2) Note if there is a mark in the blue column on the Answer Sheet to the left of the number. A mark indicates that the student's answer to the question was wrong.
(3) If there is a mark to the left of the number, note if the number of marks meet the criterion shown under ASSIGN IF # WRONG for the cluster.
(4) If the number of marks meet the criterion, put a check mark in the corresponding box in the IF ASSIGNED column.
(5) If the number of marks does not meet the criterion, make no entry in the corresponding box in the IF ASSIGNED column.

Example #1

Student's answer to question #1 was wrong.
The criterion is one question wrong.
The student meets the criterion.
The student should be assigned to FBSEP Lesson C01.
Put a check mark in the corresponding IF ASSIGNED box.

Example #2

Student's answers to questions #7, #9 and #11 were wrong.
The criterion is two to five questions wrong.
The student meets the criterion.
The student should be assigned to FBSEP lessons C05, C06 and C07.
Put a check mark in the corresponding IF ASSIGNED box.

Example #3

Student's answer to question #18 was wrong.
The criterion is two to four questions wrong.
The student does not meet the criterion.
The student should not be assigned to the corresponding FBSEP Lesson.
Put no mark in the corresponding IF ASSIGNED box.

Note: DT ITEMS #51 and #52 on the Prescription do not neatly mate with the same items on the Answer Sheet. Be sure to look at the back of the Answer Sheet for student's answers to questions #51 and #52.

d. Fill out the center column as follows.

(1) Fold the Prescription along the heavy black line which separates the left column from the center column.
(2) Lay the Prescription on top of the back side of the Answer Sheet so that the DT ITEM number on the Prescription (#53 through #100) are parallel to the number on the Answer Sheet (#53 through #100).
(3) Repeat procedure followed for the left column until you have covered the 100 items.

Note: The student's answers to DT ITEMs #101, L1 and L2 are found in the Answer Booklet.

6. Fill out page one of the Answer Booklet.

a. In the heading, enter the student's social security number, name, MOS and the date.
b. Read the Directions for Scoring in the OSC Diagnostic Test Guide. Refer to the Answer Sheet and pages 2, 3 and 4 of the Answer Booklet to make the following entries:

(1) In the Language/Right cell, enter the number of Language questions the student got right. Language questions are questions #1 through #11 on the Answer Sheet and questions L1 and L2 in the Answer Booklet. Check this Test Guide for the directions on scoring L1 and L2.
(2) In the Math/Right cell, enter the number of Math questions the student got right. Math questions are questions #12 through #37 on the Answer Sheet.

(3) In the Reading/Right cell, enter the number of Reading questions the student got right. Reading questions are questions #38 through #100 on the Answer Sheet and #101 in the Answer Booklet. Check the Test Guide for directions on scoring #101.

(4) Enter the number wrong for Language, Math, and Reading and the total right and wrong.

7. Fill out box in upper right hand corner of Prescription as follows:

   Transfer information from page #1 of Answer Booklet to box in upper right hand corner of Prescription.

8. Fill out top third of the right hand column on Prescription as follows:

   If the student's total score (number right) is lower than 56, put one check mark in the box.

   If the student's total score is 56 or higher, make no entry in the box.

9. Fill out the center of the right hand column on Prescription as follows:

   If the student's Reading score (number right) is 37 or below, put a check mark in the box.

   If the student's Reading Score is 38 or above, make no entry in the box.

10. Fill out the bottom third of the right hand column on Prescription as follows:

    If the student's Reading score (number right) is 42 or below, put a check mark in the box.

    If the student's Reading score is 43 or above, make no entry in the box.

APPENDIX G

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP BY TYPE OF LESSON AND LESSON IDENTIFICATION

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Meaning/ Definition	Concept
A			
AA		A07	
AB		A07	
AB-155			B19
abbreviated		B15	
abbreviation	C05		
AC (alternating current)			B19
accessory		B14	
accounting	C06	B12	
AC Generator 10 kw 120 V			B19
acknowledge	C06	B16	
action addressee			B18
addressee		B16	
adequate	C06	B12	
adjust			B21
align		B13	
ALL AFTER		A06	
ALL BEFORE		A06	
Allied Communication			B21
Allied Communication Procedure (ACPs)			B21
alternate frequency			B17
alternating		B13	
ammunition	C05		
angle		B13	
AN/GRA-50			B19
AN/GRC-106 Radio Set			B18
AN/GRC-142/122 Radio Teletypewriter Set			B18
announce	C06		
AN/PRC-77 Radio Set			B18
antenna			B18, B19
anti-intrusion measures			B20
anti-jamming measures			B20
appropriate	C06	B12	
AN/VRC-12 Series Radio Set			B18
AN/VRC-46 Radio Set			B18
AN/VRC-47 Radio Set			B18
AN/VRC-48 Radio Set			B18
AN/VRC-49 Radio Set			B18
AN/VSC-2 Radio Teletypewriter Set			B18
appendix			B21
AR		A07	
army regulations			B21
artillery	C06		
AS		A07	

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Type of Lesson: Meaning/ Definition	Type of Lesson: Concept
aspects		B12	
assemble			B21
assign	C06		
audio		B16	
authentic	C05	B16	
authenticate			B17
authentication			B20
AUTHENTICATION IS		A06	
authority	C05	B12	
auxiliary	C05	B14	
available	C06		
B			
bag pipes			B20
band sweep			B20
beveled		B13	
BREAK		A06	
BT		A07	
C			
C		A07	
cable		B14	
call			B18
call sign(s)			B17
capture	C06		
capability	C06		
cell		B13	
centered		B13	
CEOI			B17
CFN		A07	
challenge		B16	
circuit		B14	
civil	C07		
classification		B12	
Classified Information/Materials			B20
clean			B21
clockwise		B13	
close net			B17
cobra head			B19
code		B15	
codes			B20
collective		B16	

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Meaning/ Definition	Concept
column		B13	
communication security			B20
compromise		B15	
conductor			B19
connect			B21
consider	C05		
control		B14	
coordinate	C06		
coordinates		B16	
CORRECT		A06	
CORRECTION		A06	
counterclockwise		B13	
cryptogear			B20
cryptographic	C07	B15	
cubicle		B14	
current			B19
curtail		B12	
custodian		B15	
D			
DA Form 4158 (LOG)			B18
DA Form 4158 (operator number sheet)			B18
DA PAM 310-3			B21
DA PAM 310-4			B21
Date-Time-Group			B18
DC (Direct Current)			B19
DC Generator 3 KW 28 V			B19
DD Form 173			B18
DD Form 4004			B18
DE		A07	
deception	C05	B16	B20
decrypt			B20
defect		B14	
deficient	C07	B14	
deflect		B14	
deflection	C05	B13	
degree		B13	
deployment	C07		
designated	C07		
destruction	C05	B15	
device	C07		

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Type of Lesson: Meaning/ Definition	Type of Lesson: Concept
diameter		B13	
digraphs			B17
directed net			B17
disassemble			B21
disclose		B15	
disclosure			B20
disposal		B15	
doublet antenna			B19
dual		B16	
dummy		B14	
duplex operator			B18
E			
ECCM (Electronic Counter Counter Measures)			B20
ECM (Electronic Counter Measures)			B20
echelon		B16	
effective	C06		
effort	C06		
electronic warfare			B20
eliminate	C07		
employ	C07		
encrypt			B20
ending			B18
equipment	C06		
equipment register			B20
evacuate	C06	B12	
evaluate	C06		
execution	C05		
EXEMPT		A06, B12	
exempt addressee			B18
expander			B17
express	C07		
exposure		B15	
extract		B15	B17
F			
F		A07	
feeder line			B19
field manuals			B21
figures			B21

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Meaning/ Definition	Concept
file		B12	
fixed radio			B18
FLASH		A06	
FM		A07	
FM Series 24			B21
forfeiture	C07	B15	
free net			B17
frequency	C06	B13	B17, B18
FROM		A06	
function	C05		
G			
G		A07	
generator			B19
general	C07		
GR		A07	
GRNC		A07	
ground plane antenna			B19
ground radio			B18
GROUPS		A06	
gulls			B20
guy lines			B19
guy plates			B19
guy stakes			B19
H			
halyard			B19
handset			B18
heading			B18
headset			B18
height	C06		
horizontal		B13	
I			
identification number & title			B21
IMI		A07	
IMMEDIATE	C06		
immediately		A06	
implement	C06		
index			B17, B21
individuals			B17
INFO		A06, A07	

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Meaning/ Definition	Concept
information	C05		
information addressee			B18
inspect			B21
install			B21
insulator			B19
INT		A07	
interference		B16	B20
interrogation	C05	B16	
INTERROGATIVE		A06	
in the interest of		B12	
intrusion	C05	B16	B20
I SAY AGAIN		A06	
I SPELL		A06	
J			
jamming			B20
joint		B14	
K			
K		A07	
keyboard			B18
key list			B20
kilohertz			B18
kilowatt			B19
L			
latch		B14	
length	C06		
local		B12	
lubricate			B21
M			
maintenance MOS			B21
maintain		B15	B21
manuals		B15	B21
mast			B19
materials		B15	B20
MD-522 Modem			B18
meaconing			B20
megahertz			B18

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Meaning/ Definition	Concept
MEP - 018A			B19
MEP - 026A			B19
MESSAGE	C05	A06	B18
message number			B18
microphone			B18
MIJI report			B20
minimize	C07		
mobile	C07		
mobile radio			B18
mode		B14	
monitor		B16	
MOS			B21
mount		B14	
multiple	C07	B16	
N			
necessity	C06		
negative	C07		
net			B17
net call sign			B17
net control station			B17
nomenclature		B15	
NR		A07	
NUMBER		A06	
numeral cipher/authentication system			B20
O			
O		A07	
O5B			B17
O5C			B17
obstruction	C05	B16	
official	C06		
one-tenth		B13	
one-way operation			B18
open net			B17
operate			B21
operations code			B17, B20
operational	C05		
operator		B16	
operator maintenance			B21
operator MOS			B21
organization		B16	B17

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Meaning/ Definition	Concept
organizational maintenance			B21
orientation			B19
original maintenance			B21
originate	C07	B16	
originator			B18
OVER		A06	
P			
P		A07	
page copy			B18
percent		B13	
perforated tape			B18
phrase		B15	
physical security			B20
plain language			B20
platoon	C07		
portable radio			B18
polarization			B19
policy	C06		
power source			B19
power supply			B18
precede	C07	B12	
precedence		B12	B18
preliminary	C06	B12	
preventative maintenance			B21
primary frequency			B17
PRIORITY	C06	A06	
procedure	C05		
proceed	C05		
projection		B14	
promulgation	C05		
prosigns			B18
prowords			B18
PU-332(*)IG			B19
PU-619/M			B19
R			
R		A07	
radio			B17, B18
radio telegraph			B17
radio telephone			B17
			B17

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Meaning/ Definition	Concept
radio teletypewriter			B17
radio teletypewriter operator			B17
RATEL			B17
RATT			B17
RC-292			B19
rebuild			B21
receipt	C06		
receive	C06		
receiver			B18
receiver/transmitter			B18
receptacle	C07	B14	
references			B21
refile	C05		
refill	C05		
remote		B12	
repair			B21
replacement	C07		
relevant	C07		
repetition	C05		
replacement	C07		
resource	C06		
response	C07		
request	C06		
revocation		B15	
RF conductor			B19
right angle		B13	
ROGER		A06	
ROUTINE	C07	A06	
row		B13	
RTG			B17
safeguard			B20
SAY AGAIN		A06	
secure			B20
security			B20
secure net			
service message			B18
sequence		B12	
shortage	C05		
slack		314	
soldier's manual			B21
siting			B19
speaker			B18

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

Word/Term	Type of Lesson: Spelling	Meaning/ Definition	Concept
square inch		B13	
station			B17
station serial number			B18
subsequent	C06	B12	
substation			B17
suffix			B17
supersede	C05		
supplement			B17
supply	C05		
suspension	C05	B15	
switch		B14	
symbol		B15	
T			
T		A07	
tables			B21
table of contents			321
tactics	C06		
technical manuals		B21	
telecommunications center operator			B17
telegraph			B17
telephone			B17
teletypewriter			B17, B18
tension		B14	
test		B16	B21
text		B15	B18
TM Series 11			B21
TM Suffix 10 Series			B21
TM Suffix 12 Series			B21
THIS IS		A06	
TIME		A06	
time periods			B17
TO		A06, A07	
traffic	C06		
transmission line			B19
transmit		B16	
transmitter			B18
transmitter/distributor			B18tripod
tripod		B14	
troubleshoot		316	B21
TSEC/KY-7			B20
TSEC/KY-8			B20

MASTER LIST OF WORDS AND TERMS TAUGHT IN FBSEP
BY TYPE OF LESSON AND LESSON IDENTIFICATION

		Type of Lesson		
	Word/Term	Spelling	Meaning/ Definition	Concept
	TSEC/KY-38			B20
	TT-4 Teletypewriter			B18
	TT-76 Teletypewriter (Reperforator/ Transmitter)			B18
	TT-98 Teletypewriter			B18
U				
	unauthorized		B12	
	usefulness	C07		
V				
	vehicular radio			B18
	ventilation	C05	B14	
	verify	C05	B16	
	vertical		B13	
	voice radio operator			B17
	volt			B19
W				
	WA		A07	
	WAIT		A06	
	WB		A07	
	weather	C07		
	whip antenna			B19
	WORD AFTER		A06	
	WORD BEFORE		A06	
	WORD TWICE		A06	
X				
	XMT		A07	
Z				
	Z		A07	
	zone		B12	

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